JOURNAL OF THE EUROPEAN ĀYURVEDIC SOCIETY

Editors

RAHUL PETER DAS

RONALD ERIC EMMERICK

Editorial Board

Rudi Paul Labadie (Netherlands) Gerrit Jan Meulenbeld (Netherlands)
Arion Roşu (France)

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J. Wigostyk

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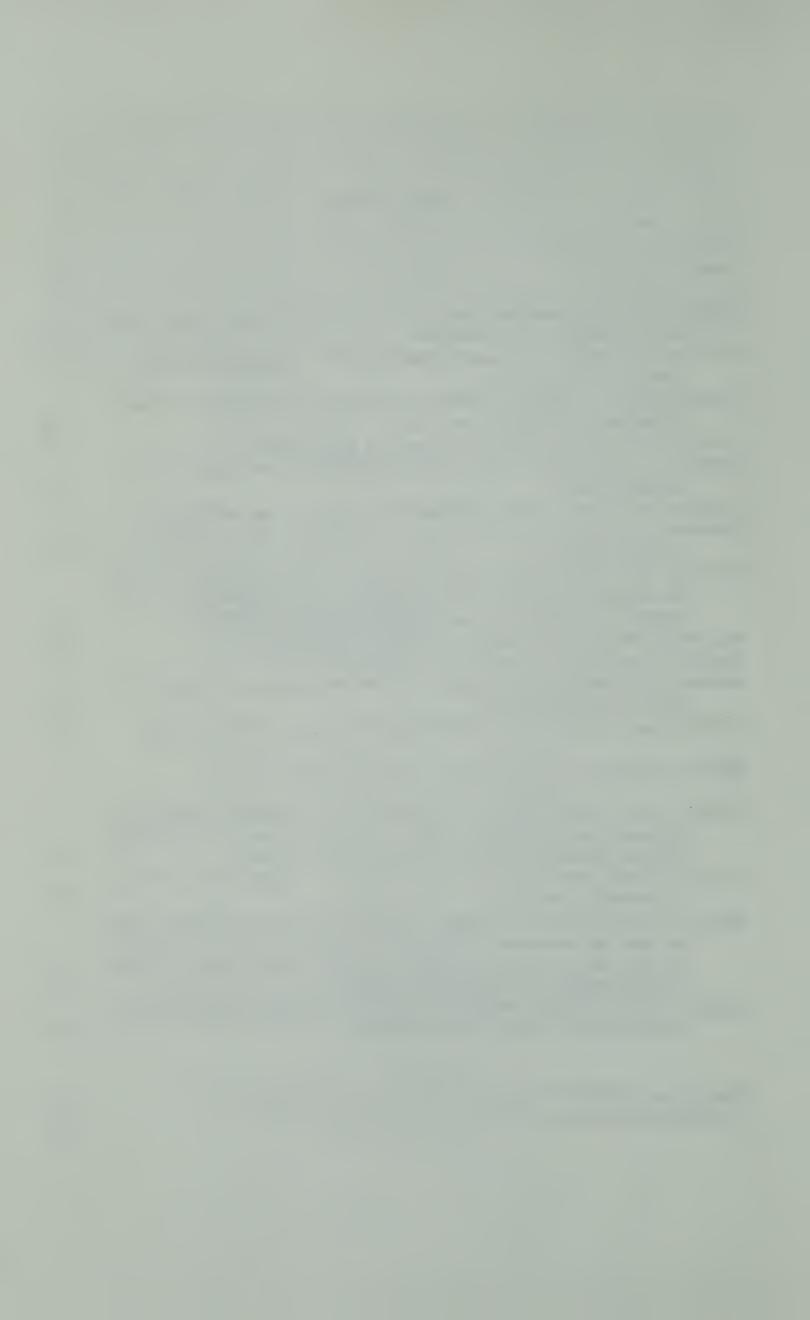
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Conformities and Divergences of Basic Ayurvedic Concepts in Veterinary Texts

GERRIT JAN MEULENBELD

The classical treatises on āyurveda clearly state that this science can be applied to all living organisms. For obvious reasons the majority of the references relate to mammals, but some of them concern other vertebrates, such as birds and fishes, too. There are however seemingly no references to amphibians and reptiles in this context. As regards invertebrates, insects are considered worthy of having āyurvedic concepts applied to them, though the physiology of leeches too was of interest to physicians. The range of āyurveda is not even restricted to the animal kingdom, since special treatises have been composed on its application to plants, especially cultivated trees and shrubs. In rare instances medical concepts are even used in relation to inanimate entities.

An example of the wide range of āyurveda is found in the story about the mythic origin of fever, told in many texts. Fever, a disorder ultimately originating from divine wrath, is said to occur in all living beings, and is designated by a special term in each group of these. The tale acquaints us with the name of fever in very diverse animals, not only in various, mostly domesticated, mammals, but also in birds and fishes, and even in grasshoppers. Most remarkable, however, is that not only plants, but even mountains, water and soil are seen as capable of producing symptoms indicative of fever. This account of the origin and widespread occurrence of fever is found, in closely related versions, both in texts dealing with human medicine and in veterinary treatises.³

Another subject, dealt with in both types of treatises, in completely identical verses, is the size of the central digestive fire in human beings and a number of animals.⁴ The description of the stages of poisoning induced the ancient Indian physicians to make some interesting remarks on comparative pathophysiology.⁵ Stray references to the treatment of animals are found throughout āyurvedic literature from the oldest to the most recent texts.⁶

The treatises devoted to veterinary science are not as large in number as those on human āyurveda, but this branch of medical literature forms a distinct corpus with its own basic texts. The same applies to vṛkṣāyurveda.

¹ See Su. Sū. 13; A.h. Sū. 26; A.s. Sū. 35.

² See on this subject: Rahul Peter Das, Das Wissen von der Lebensspanne der Bäume.

³ Aruņadatta, Candranandana and Śrīdāsapaṇḍita on A.h. Ni. 2.2; Basavarājīya, p.7; Cakrapāṇidatta on Ca. Ni. 1.35; Palhaṇa on Su. U. 39.9; Hārītasaṃhitā III.2.32-35; Jīvānanda 6.56-59; Pālakāpya's Hastyāyurveda I.9; Vijayarakṣita in Vyākhyāmadhukośa on Mādhavanidāna 2.1 (quoted from Pālakāpya).

⁴ Bhelasaṃhitā Śā. 4.16-17ab; Ṭoḍara's Āyurvedasaukhya (vol. II: 4.15-16ab); Pālakāpya's Hastyāyurveda II.65.

⁵ Ca. Ci. 23.21-23. Compare Su. Ka. 4.42-45.

⁶ Haramekhalā 4.398-413; Bhoja's Rājamārtaṇḍa 34; Nārāyaṇa's Tantrasārasaṇgraha 30; Basava's Śivatattvaratnākara VII.13.240-253.

The animals that play a prominent role in veterinary medicine are horses and elephants. Less attention is given to bovine animals, goats, sheep, dogs, fowl, etc. The importance of the care for and treatment of horses and elephants is explained by the use of these animals as essential components of armies. A considerable number of treatises on horses and elephants have been preserved, but this literature has unfortunately been neglected. Only a few texts have been edited and translations are rare; one text on elephants, Nīlakaṇṭha's Mātaṅgalīlā, is the only work that is available in a German and an English translation.⁷

The comparative study of Indian human and veterinary medicine is, however, not only interesting in itself, but may also considerably contribute to an elucidation of the origins and development of basic concepts and principles of treatment. Of particular relevance in this regard is the science dealing with elephants and their diseases, which in India is an old one with a long history. Several Greek authors who refer to it in their writings have preserved for us part of the information that was at their disposal. Little is known about the chronology of the texts, of both those on elephants and those on horses, but some studies, especially on aśvaśāstra, provide us with useful material for determining the probable periods of composition of some treatises. Further studies must be carried out, however, in particular with regard to the literature on hastyāyurveda. A more detailed chronological scheme would further our understanding of the development of āyurvedic theory and its basic concepts.

This paper will examine the theory of the *doşa*s as found in veterinary texts and assess the results of this examination with respect to the evolution of medical thought in India.

The treatise on aśvāyurveda regarded as classical, and preserved in a Sanskrit and in a Tibetan version, is ascribed to Śālihotra. Later texts usually refer to him as the main authority on horses and their diseases. One of these texts is the Aśvacikitsita attributed to Nakula, a work of a compilatory character that may date from A.D. 1000 or somewhat earlier. This treatise, although based in large measure on the tridoṣa doctrine, contains an extremely interesting chapter of a different theoretical orientation. This chapter of the Aśvacikitsita, the tenth, called Dhātuparīkṣā and devoted to pathophysiology, describes raktadoṣa, a corruption of blood, as the primary cause of diseases in horses, leading, when inadequately treated, to excitement of bile, phlegm and wind. The symptoms caused by the excited doṣas are then described, followed by those arising from an excitement of blood in combination with one of the doṣas or all three together.

The major treatise on hastyāyurveda, simply entitled *Hastyāyurveda* and ascribed to Pālakāpya, has, unlike Śālihotra's work, been edited. This important text, written in a

⁷ H. Zimmer, Spiel um den Elefanten; F. Edgerton, The elephant-lore of the Hindus.

⁸ See J. Filliozat, Les gajaçāstra et les auteurs grecs.

⁹ See A.-M. Blondeau, *Matériaux pour l'étude de l'hippologie et de l'hippiatrie tibétaines*. P. K. Gode also devoted some articles to this subject.

¹⁰ See on its contents: A.-M. Blondeau, pp.43-45; G. Mukhopadhyaya, *History of Indian Medicine* II, pp.366-392.

¹¹ See A.-M. Blondeau, p.48.

mixture of verse and prose, is unfortunately of uncertain chronology¹², but contains a wealth of interesting material. It is said to contain 12,000 verses, 13 which cannot be verified since the extant text is incomplete and because the only edition we possess shows numerous lacunae. The work is arranged in a peculiar fashion; it is divided into four sections, respectively called Mahārogasthāna (eighteen chapters), Kṣudrarogasthāna (seventy-two chapters), Śalyasthāna (thirty-four chapters), and Uttara- or Parivārasthāna (thirty-six chapters). 14 In some respects it resembles the Carakasamhitā and the Suśrutasamhitā. The opening chapter describes an assembly of sages at the court of Romapāda, king of Anga. Both this king and the sages are eager to be instructed in the science of hastyāyurveda. A comparable introduction occurs in both the Carakasamhitā and the Suśrutasamhitā. Like these samhitās, Pālakāpya's work is composed of chapters in the form of a dialogue between a teacher, in this case Pālakāpya, and a pupil, here Romapāda, who is surrounded by a group of sages. Differences of opinion on certain theoretical issues¹⁵, and the names of authorities adhering to conflicting points of view¹⁶, are sometimes recorded, which is a characteristic of the Carakasamhitā and the Suśrutasamhitā too. In some instances the subjects on which divergent views are mentioned are indeed the same as in the Carakasamhitā and the Suśrutasamhitā. 17

Other features common to the *Hastyāyurveda* on the one hand and the *Carakasaṃhitā* and the *Suśrutasaṃhitā* on the other are a number of chapter-headings¹⁸, the names of surgical instruments¹⁹, the number of vulnerable spots (*marman*) of the body²⁰, some of the nosological entities and their subdivisions²¹, the major part of the materia medica, etc.

Due to the dissimilarities between an elephant's body and that of a human being there are however also many differences. Consequently a considerable number of diseases described by Pālakāpya are unknown in human medicine.

¹² It is quoted by Kṣīrasvāmin in his commentary on the *Amarakośa* and is therefore earlier than the first half of the twelfth century.

¹³ Hastyāyurveda I.4.103cd-104ab.

¹⁴ The complete treatise is said to consist of 170 chapters (I.4.102).

¹⁵ Hastyāvurveda III.9.27-29 (on the problem of which part of the foetus develops first).

¹⁶ Hastyāyurveda IV.4 (on how many types of sneha there are).

¹⁷ Compare Ca. Śā. 6 and Su. Śā. 3 (on the problem of which part of the embryo develops first) with Hastyāyurveda III.9.27-29.

¹⁸ Hastyāyurveda I.6: Śiṣyopanayana (compare Su. Sū. 2); III.1: Dvivraṇīya (compare Su. Ci. 1); III.8: Garbhāvakrānti (compare Ca. Śā. 3 and 4; Su. Śā. 3); III.9: Śarīravicaya (compare Ca. Śā. 6); III.12: Śalyoddharaṇa (compare Su. Sū. 27: Śalyāpanayana); IV.3: Annapānavidhi (compare Ca. Sū. 27; Su. Sū. 46).

¹⁹ See III.10 and 11.

²⁰ See III.20.

²¹ Hastyāyurveda II.68, for example, distinguishes the same five types of gulma as Caraka and Suśruta.

Particularly interesting is the classification of the diseases in Pālakāpya's work. In both *Hastyāyurveda* and *Suśrutasaṃhitā*, these are roughly divided into three broad categories, called *ādhyātmika*, *ādhibhautika* and *ādhidaivika*.²² The first category arises from bodily or mental causes, the second from causes outside the body, while the third is brought about by divinities, malignant beings and fate.

Important in the context of this paper is the first category, subdivided into bodily and mental diseases. The mental disorders of elephants will not be discussed, attractive as the subject may be. Of particular interest is the classification of the bodily diseases caused by one *doṣa* or a combination of more than one.²³

The diseases associated with a single doṣa are said to be brought about by wind, bile, phlegm or blood. Their respective numbers are specified by Pālakāpya: wind gives rise to seventy-six, bile to twenty-seven, phlegm to thirty-two, and blood to fifteen diseases. Noteworthy is the absence of the fixed ratio found in human āyurveda, which acknowledges eighty diseases caused by wind, forty by bile and twenty by phlegm. In post-classical treatises on human medicine diseases arising from blood are added to the groups formed by each of the doṣas.²⁴

The *Hastyāyurveda* also presents lists of diseases associated with two *doṣas*, three *doṣas* and all the four *doṣas* together. Wind and bile bring about fourteen, wind and phlegm sixteen, bile and phlegm three, wind and blood seven, phlegm and blood three diseases. The combination of bile and blood is absent. Wind, bile and blood, as well as wind, phlegm and blood are at the origin of three diseases, while bile, phlegm and blood give rise to one disease only.

The number of diseases by simultaneous excitement of all the doṣas (saṃnipāta) is said to be twenty-two, but it is not stated in unequivocal terms that this saṃnipāta is to be interpreted as an involvement of all four doṣas. A perusal of those parts of the Hastyāyurveda which describe the disorders said to be sāṃnipātika makes clear that some of them are caused by three, some by four doṣas.

This remarkable classification, found in chapter four of section one, has no parallel in texts on human āyurveda. It is striking, however, that it does not fully tally with the contents of other chapters of the *Hastyāyurveda* where disorders are described that are absent from the lists referred to above. A few examples may suffice to illustrate this. Haematuria (śoṇitameha; II.48) does not turn up among the diseases caused by blood. The sāṇnipātika type of ānāha (I.12) is not recorded among the twenty-two sāṇnipātika diseases, nor an affection of the skin (chavīdoṣa) called tṛṇapuṣpī, brought about by wind, phlegm and blood (II.55), or a particular group of parasites said to be associated with the four doṣas (II.59).

These examples are evidence of a lack of consistency in the *Hastyāyurveda*, which points to a heterogeneous origin and structure. This is particularly obvious with respect to the theory of the *doṣas*. Many passages can be collected which imply that their number is three, while those which assume a number of four also occur repeatedly. I shall present some examples of the latter category.

²² Hastyāyurveda I.7.3-6; Su. Sū. 24.

²³ Hastyāyurveda I.7.7-46.

²⁴ See for example the Śārigadharasaṃhitā (I.7.125cd-127ab).

The Hastyāyurveda distinguishes, in the same way as the Carakasaṃhitā, the Suśruta-saṃhitā and the majority of the other treatises on human āyurveda, three types of regions: jāṅgala, ānūpa and sādhāraṇa. The jāṅgala type, a rather arid region sparsely grown with trees, is characterized as one in which diseases caused by wind, bile and blood abound, whereas the ānūpa type, a marshy region, is conducive to the development of diseases caused by phlegm (III.6). The Carakasaṃhitā (Kalpasthāna 1. 8) states that those living in a jāṅgala region are prone to disorders arising from wind and bile, and those residing in a region of the ānūpa type to disorders from wind and phlegm. The Carakasaṃhitā does not mention that diseases caused by blood are frequent in a jāṅgala country, which is the more remarkable since the descriptions of the types of country are almost identical in Carakasaṃhitā and Hastyāyurveda.

Pālakāpya associates the colour of an elephant's body with wind, bile, phlegm and blood (III.7), whereas the *Carakasaṃhitā* (Śā. 8.15) and the *Suśrutasaṃhitā* (Śā. 2.35) regard the colour of the skin as connected with the five elements (*mahābhūta*), space, air, fire, water, and earth. A chapter of the *Hastyāyurveda* devoted to descriptions of several breeds of elephants (III.8) deals more elaborately with the origin of the colours of an elephant's skin and all sorts of other characteristics, considering them in this context as related to one of the four *doṣas* or combinations of two or more of them.

This selection of material from Pālakāpya's *Hastyāyurveda* and Nakula's *Aśvacikitsita* proves that in India a medical school, at least a school of veterinary medicine, existed that accepted blood as one of a set of four *doṣas*. Unfortunately, the chronological position of both works is vague, and as a result, it is impossible to determine the period to which this theory which recognizes four *doṣas* belongs. It seems however probable that this theory forms part of an old medical tradition which also left its traces in the classical saṃhitās of Caraka and Suśruta and a number of other treatises on human āyurveda.²⁵

ABBREVIATIONS

A.h.	Aṣṭāṅgahṛdayasaṃhitā	Ni.	Nidānasthāna
A.s.	Aṣṭāṅgasaṅgraha	Śā.	Śārīrasthāna
Ca.	Carakasaṃhitā	Su.	Suśrutasaṃhitā
Ci.	Cikitsāsthāna	Sū.	Sūtrasthāna
Ka.	Kalpasthāna	U.	Uttarasthāna/Uttaratantra

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²⁵ On this tradition in works on human āyurveda see G.J. Meulenbeld, The constraints of theory in the evolution of nosological classifications.

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Universal (sāmānya) and Particular (viśeṣa) in Vaiśeṣika and in Āyurveda*

ANTONELLA COMBA

The problem of universals has been debated for a long time both in Western and in Eastern thought. Essentially, it is the problem, even nowadays very much discussed, of the relationship between sense objects, thought, and language. Even if it is true that every attempt at reducing logic to semantics, or vice versa, is doomed to failure, it can nevertheless not be denied that thought and language work closely together in building up sense perceptions; these, though presenting themselves fragmentarily, are grouped together and structured according to a form which makes them intelligible. It is precisely this form which makes possible the recognition and identification of an object with something already perceived or thought of before, the distinction between different objects, or the cognition of a 'thing' as such, and therefore it is this very form which makes knowledge possible.

But how does this organization and structuring of perceptions into forms take place, and what are its causes? A very famous passage of the *Isagoge* of Porphyrius lists various solutions to the problem of the universals and at the same time points out the difficulty of choosing one of them, even only for a correct interpretation of the *Categories* of Aristotle: 'Now, with reference to genera and species, I shall refrain from saying whether they really exist or are only conceptions in the mind, and if existing, whether they are corporeal or incorporeal, and whether they are separate or exist in sense-objects and are dependent upon them, because such a problem requires an investigation different and of wider scope'.²

In the history of Indian thought we find all these various positions represented, obviously with nuances different from those of the corresponding Western positions. Not only has the problem of the universals given place in India, just as in Western scholastic philosophy, to endless discussions, with a sharp contraposition especially between Buddhist 'nominalism' and the 'extreme realism' of the Vaiśeṣika school,³ but, as we shall see, this debate has filtered into the literature of ancient Indian science and especially into that of Āyurvedic medicine, which has manifold points of contact with Indian

^{*} I wish to thank Dr. Arion Roşu for his valuable suggestions and unfailing encouragement.

¹ Cf. A. Nocentini, *Presentazione*, in: J.H. Greenberg, *Universali del linguaggio*, Firenze 1975 (1st ed.1966), pp.V-VI.

² Porphyrii Isagoge sive quinque voces, ed. A. Busse, in Commentaria in Aristotelem Graeca IV,1, Berlin 1887, pp.1;10-14, quoted in Bruno Maioli, Gli universali. Alle origini del problema, Roma 1973, p.13.

³ See R.R. Dravid, The problem of universals in Indian philosophy, Delhi 1972, passim. On this school of thought and its texts, see the bibliography in K.H. Potter, Encyclopedia of Indian Philosophies, vol.I, Bibliography, 2nd revised edition, Delhi 1983, pp.677-688, and the works cited in this article; see also E.P. Ostrovskaja, 'Ob istolkovaniji terminov sāmānya i višeṣa v "Tarkasangrahe" Annambhatty', in Literatura i kul'tura drevnej i srednevekovoj indiji, Moskva 1987, pp.163-173, H. Nakamura, 'Vaiśeṣika tetsugaku ni okeru fuhen to tokushuna', in Katsumata Shunkyō hakushi koki kinen ronshū. Daijō Bukkyō kara mikkyō e, Tokyo 1981, pp.509-530 (I wish to thank Kimiaki Tanaka for having kindly sent me this article).

philosophy.⁴ Just as Āyurvedic ideas and terminology have travelled with Buddhist pilgrims from India to Tibet, and then on to China, sometimes losing along the way part of their meaning and congruence, so the philosophical doctrines of certain Indian schools too have migrated into Āyurvedic medicine, i.e. into a conceptual framework quite different from that in which they were originally conceived. When they could not be made use of as they were, they have been adjusted and fitted to the special needs of physicians, or otherwise kept in the texts as something important more because of its presence than because of its practical usefulness.

The opinions of scholars regarding the concepts of sāmānya and viśeṣa in Vaiśeṣika and in Āyurveda, and those on their passage from Vaiśeṣika to Āyurveda, vary considerably. In the first place, while most scholars recognize the extreme realism of Vaiśeṣika, there are some who deny it, especially as regards Kaṇāda, mythical founder of the school and author of its most basic text, the Vaiśeṣikasūtra; then there are those who think that it is not medical texts which have borrowed something from Vaiśeṣika, but the latter from the former; finally, there are some who maintain that in Āyurveda the universals have functions altogether different from those which they originally had in Vaiśeṣika.

Another problem in comparing the meaning which the concepts of *sāmānya* and *viśeṣa* have in Vaiśeṣika and in Āyurveda is represented by the range of texts to examine: in principle, it would be better to compare texts belonging to the same period, but the difficulty of dating them makes adopting such a criterion highly problematic. Therefore we shall consider only the texts universally considered as the oldest and the most important, and their commentaries, when essential for a correct understanding of the text: for Āyur-

⁴ On Ayurvedic thought, see S.N. Dasgupta, A history of Indian philosophy, (1st edition Cambridge 1922), Delhi 1975, vol.I, pp.212ff.;280ff.; vol.II, pp.273-436, K. Krishnamoorthy, 'The conception of personality in the Carakasamhitā and the concept of prajñāparādha', in The Poona Orientalist, XV,1-4.1950, pp.65-89; C.G. Kashikar and S.G. Vartak, Ayurvedīya-Padārthavijñāna, Bombay 1953; W. Ruben, Geschichte der indischen Philosophie, Berlin 1954, pp.212-223; V.M. Bedekar, 'Studies in Sāmkhya: Pañcaśikha and Caraka', in Annals of the Bhandarkar Oriental Research Institute, 38.1958, pp.233-244; K.B. Ramakrishna Rao, 'The Sāmkhya philosophy in the Carakasamhita', in The Adyar Library Bulletin, XXVI, 3-4.1962, pp.193-205; J. Filliozat, 'L'esprit de la science indienne. La logique théorique des médecins', in Annuaire du Collège de France, 67.1967-1968, pp.391-393; J. Filliozat, 'L'esprit de la science indienne. Le raisonnement et la discussion en médecine', in Annuaire du Collège de France, 68.1968-1969, pp.439-444; A. Wezler, 'Die "dreifache" Schlussfolgerung im Nyāyasūtra 1.1.5', in Indo-Iranian Journal, 11.1969, pp.190-211; H. Narain, Evolution of Nyāya-Vaiśeṣika categoriology. I: Early Nyāya-Vaiśeṣesika categoriology, Varanasi 1976; A. Roşu, Les conceptions psychologiques dans les textes médicaux indiens, Paris 1978; S. Śrīvāstavya, Carak Samhitā kī dārśanik pṛṣṭhabhūmi, Allahabad 1983; M.G. Weiss, 'Caraka Samhitā on the doctrine of karma', in Karma and rebirth in the Indian classical tradition, ed. by W.D. O'Flaherty, Berkeley 1980, pp.90-115; A. Comba, 'Carakasamhitā, Śārīrasthāna I and Vaisesika philosophy', in Studies on Indian medical history, ed. by G.J. Meulenbeld and D. Wujastyk, Groningen 1987, pp.43-61; G. Liétard et P. Cordier, Travaux sur l'histoire de la médecine indienne, documents réunis et présentés par A. Rosu, Paris 1989.

⁵ Cf. infra, note 27.

⁶ Cf. D. Chattopadhyaya, Science and society in ancient India, (1st edition 1977), Calcutta 1979, p.142 and passim. I have made a first series of objections to this thesis at the First Biannual Meeting of the European Chapter of the IASTAM, held in Monaco from the 27th to the 29th October 1989; a summary of my paper is forthcoming in the IASTAM Newsletter edited in Paris by Francis Zimmermann.

⁷ Cf. infra, and note 77.

veda, the Carakasaṃhitā by Agniveśa-Caraka, the Suśrutasaṃhitā by Suśruta, the Aṣṭāṅgahṛdaya and the Aṣṭāṅgasaṅgraha by (the two?) Vāgbhaṭa(s); for Vaiśeṣika, the Vaiśeṣikasūtra by Kaṇāda and the Praśastapādabhāṣya by Praśastapāda. Another text important for Vaiśeṣika is also the Daśapadārthaśāstra by Candramati or Maticandra, of which only the Chinese version is available, the original Sanskrit work being lost.⁸

Among medical texts, the Carakasamhitā and its commentary, the Āyurvedadīpikā, have special relevance, as they contain quotations from the Vaiśeṣikasūtra, thus revealing a direct relationship to this text. But why has the author or have the authors of medical works such as the Carakasamhitā given such prominence to Vaiśeṣika philosophical theories? Certainly Vaiśeṣika is not the only school of thought to provide material for Āyurvedic speculation: Sāṃkhya too is important, and to a lesser degree the teachings of Nyāya and Vedānta are also made use of. The fundamental part played by Vaiśeṣika is however brought out by the place its theories have been assigned for their exposition within the work of Agniveśa-Caraka: the beginning of the first chapter. This means that Vaiśeṣika thought is considered to be especially useful for medicine, and the reason for this usefulness will most probably have to be sought in its gnoseology and metaphysics.

Vaisesika tries to account, with economy, thoroughness and cogency, for phenomena as they appear to us. Every 'cognition' (buddhi) we have can be explained by some principle; if the principles already defined cannot account for a certain cognition, we must infer the existence of another principle. But which are the basic principles and how are they defined?

The basic principles, promptly called 'categories' by Western indologists, though Praśastapāda calls them *padārthas*, 'objects of names',¹⁰ are three: substance, quality and motion¹¹. The definitions given to them by Kaṇāda are already the result of a sophisticated elaboration, even though Vaiśeṣika is considered by its followers as the 'viewpoint of the common man': for example, substance is defined as 'that in which are

⁸ There is an English translation of this text in H. Ui, The Vaiśeşika philosophy according to the Daśapadārthaśāstra, Varanasi 1962, 2nd ed. (1st ed. 1917), pp.3-119.

⁹ For the sūtras quoted in the first adhyāya of the Śārīrasthāna of the CS, cf. A. Comba, op. cit., pp.47ff.; for the sūtras quoted by the commentator Cakrapāṇidatta (henceforth: Cakra), cf. e.g. Cakra ad CS, Sūtra I,1,1. Cakra also quotes other Vaiśeṣika texts, e.g. the Praśastapādabhāṣya (cf. Cakra ad CS Sūtra I,44; PPB p.49).

¹⁰ Cf. PPB p.15. 'Objects of names' (or 'objects of words') is admittedly not a perfect translation of padārtha, as among the dravyas we find the ātman, which is the subject and not an 'object'. But a perusal of Praśastapāda and Śrīdhara makes one realise that different translations create difficulties, as expressions such as e.g. 'word-meaning' can also refer to impossible, absolutely non-existent things like a hare's horn, whereas the term padārtha always refers to things which have an ontological reality, such as substances etc.

¹¹ In the Vaiśeṣika context the word *karman*, though often translated as 'action', is better translated as 'motion'; an atom does not 'act', it moves. Of course one could opine that a motion is itself an action, but there is a difference in this sort of action and 'action' in other contexts such as e.g. Āyurveda: while Vaiśeṣika speaks chiefly of causal substances, Āyurveda is concerned mainly with effect-substances (*kāryadravya*), that is, man, who performs actions. Thus I have translated *karman* with 'motion' when dealing with Vaiśeṣika theories (also in Āyurvedic passages), but when Cakra speaks of the *karman* of patients (such as gymnastics etc.) (see *infra*), then I feel compelled to translate *karman* with 'action', which of course can subsume a motion too.

motions, that in which are qualities, that which is an inherential cause'.¹² One of the nine substances inferred by Kaṇāda is earth.¹³ But it would be a mistake to think of this as brown lumps of dirt; earth is, by definition, the only substance which has smell, but it can assume every possible colour.¹⁴

It is impossible to explain here all the implications of such a definition, or to examine the way Kaṇāda has reached it: for the time being suffice it to say that all the definitions of this system are connected to each other by a thick web of relationships and underlying argumentations, so that no definition can be fully understood unless it is considered together with all the others, as is the case for the rules in the Sanskrit grammar of Pāṇini. It is in this context that the deduction of the *padārthas* (which, for convenience and following established practice, we shall translate as 'categories', though see *supra*) sāmānya and viśeṣa takes place.

The first universal (sāmānya) to be deduced is 'being' (bhāva, sattā). We cognize substances, qualities and motions; but we also have the cognition that they 'exist'. What produces this cognition? Not a substance (dravya), because, by definition, there are only two types of substances: those which have as substrate two or more other substances (anekadravyavat), like for example a vessel which has as substrate many atoms of earth, and those which do not have any other substance as substrate (adravyavat), like an atom or time. 16 But the 'being' which we cognize is an undivided whole inherent in each single substance, something which, according to Vaisesika terminology, 'has a single substance as substrate' (ekadravyavat). Therefore 'being' cannot be a substance. Nor can 'being' be a quality (guna), because by definition a quality cannot inhere in another quality, but only in a substance; if 'being' were a quality, then, saying that, for example, the red colour 'is', we would be making a quality inhere in another quality, and this is not possible. We encounter the same difficulty if we take 'being' as a motion (karman), because the latter, too, can inhere only in substances. To 'being' is something different from substance, quality and motion: it is a 'universal' (sāmānya). The mark (linga) by which its existence is inferred is the cognition that a thing 'is'; now, as this cognition does not vary according to the occurrences or the substrates of this 'being', and as 'being' is not signalled or marked by different lingas, Kanada comes to the conclusion that 'being' is one and the same everywhere. 18 So the universal is, paradoxically, one and the same in different individuals, in each of which it inheres entirely, without fragmenting itself: we do not perceive in each thing a fraction of 'being', but 'being' is wholly in every

¹² VS (Candra) I,1,14. An inherential cause is that in which the effect inheres: e.g. atoms of earth are the inherential cause of a vessel, because a vessel is made up of atoms of earth, in which it inheres.

¹³ VS (Candra) I,1,4.

¹⁴ Cf. VS (Candra) II,1,1-2 and the commentary by Candrānanda. Therefore, every time we perceive a smell, we can be sure that atoms of earth are present.

¹⁵ VS (Candra) I,2,7.

¹⁶ Candrānanda ad VS (Candra) I,2,9.

¹⁷ VS (Candra) I,2,8-10 and the commentary by Candrānanda.

¹⁸ VS (Candra) I,2,18.

existing substance, quality and motion. We shall see later how the commentators have tried to solve the problem of the being of 'being', without falling into an infinite regress.

But 'being' is not the only existing universal: Kaṇāda in a similar way also deduces the existence of substance-hood (dravyatva), of quality-hood (guṇatva) and of motion-hood (karmatva), which inhere respectively in substances, qualities and motions. There is however an important difference between these universals and 'being': while 'being' is but a universal, 19 because it inheres in all that 'is' — substances, qualities and motions —, substance-hood and the other universals are at the same time also particulars (viśeṣa). 20 What is a particular?

In the Vaiśeṣikasūtra the term is used with two different meanings: in the first place, it refers to the universal itself, when it produces a diversifying cognition.²¹ For example, 'substance-hood' functions as a universal when it makes us recognize a substance, but functions as a particular when it makes it possible for us to distinguish between a substance and a quality.²² As 'being' is the only universal which does not function as a particular, Praśastapāda later calls it 'superior' (para), as opposed to all the others, which he calls 'inferior' (apara). Kaṇāda normally refers to the latter with the compound sāmānyaviśeṣa 'universal-particular', ²³ though this is not always the case: according to the commentator Candrānanda, there is a sūtra in which sāmānya stands for the universal 'being', while viśeṣa stands for substance-hood and the other inferior universals.²⁴

In the second place, the term *viśeṣa* is used by Kaṇāda, in combination with the adjective *antya* ('last', 'ultimate'), to refer to what are 'particulars' in the proper sense of the word, and which constitute another *padārtha*; of these 'ultimate particulars', Kaṇāda says only that they are different from the universal-particulars.²⁵ We shall see later which considerations Praśastapāda makes on this subject.

But let us return once again to the universal-particulars, because they are at the center of the debate between those scholars who maintain that Kaṇāda was a conceptualist and those who believe him to have been a realist. The former base their thesis on the sūtra in which the universal-particulars are mentioned for the first time. The sūtra says: "Universal", "particular", depend upon cognition'. In this sūtra Kaṇāda is, according to them, denying the independent and extra-mental reality of universals; Praśastapāda

¹⁹ VS (Candra) I,2,4.

²⁰ VS (Candra) 1,2,5.

²¹ VS (Candra) I,2,3.

²² Cf. VS (Candra) I,2,5; PPB p.746 and NK on it.

²³ Cf. e.g. VS (Candra) I,2.11.

²⁴ Cf. VS (Candra) VIII,6 and the commentary by Candrānanda. Cf. also VS (Candra) VIII,5, where, according to Candrānanda, sāmāṇya stands for all the universals, and viśeṣa for the 'ultimate particulars' (see infra).

²⁵ VS (Candra) 1,2,6.

²⁶ VS (Candra) I,2,3: sāmānyam višeşa iti buddhyapekşam.

and his successors would then have adopted a 'realist' position, twisting the words of Kaṇāda.²⁷ This interpretation, however, produces serious inconsistencies in the system, even leaving aside the commentators and keeping to what the *sūtras* themselves say. For example, the universals cannot possibly depend upon a *buddhi* or cognition in the sense of being caused by this, because a *buddhi* is a quality,²⁸ and a quality can cause only substances, qualities and motions,²⁹ and the universals are neither substances, nor qualities, nor motions.³⁰

Secondly, if the universals were dependent on cognition in the sense of being produced by these, they would not any more be permanent and uncaused. It is true that there is no sūtra which speaks of the permanence, or rather, of the eternity³¹ of the universals, nor of the ultimate particulars, nor of inherence. Nevertheless Kaṇāda says that 'substances, qualities and motions do not differ from each other in being, in being not eternal, in having substances [as inherential causes], in being effects and causes and in having universal-particulars [inhering in them]'.³² From this it can easily be concluded that all these characteristics possessed by substances, qualities and motions do not belong to the other entities of Kaṇāda (that is, universals, particulars and inherence). This is actually the conclusion drawn by all the commentators.³³ Obviously there are exceptions to what the sūtra affirms: on the one hand, not all substances have causes (for example, atoms are eternal),³⁴ while on the other hand universals, just like substances and the other categories, can be causes, because they cause the cognitions which reveal them.

²⁷ Cf. the remarks of Y.V. Athalye in Annambhatta, *Tarkasamgraha*, ed. with critical and explanatory notes by Y.V. Athalye together with introd. and English translation by M.R. Bodas, Bombay 1963, 2nd rev. ed. (1st ed. 1897), pp.90f.; B. Faddegon, *The Vaiśeṣika-system*, Wiesbaden 1969 (Neudruck der Ausgabe von 1918), p.146 and p.289; A.B. Keith, *Indian logic and atomism*, New Delhi, 1977 (1st ed. 1921), p.37; S.N. Dasgupta, op. cit. vol.I, p.281, vol.II, p.371; S.S. Barlingay, 'The theory of sāmānya or jāti', in Shakti, II,7.1965, p.21; W. Halbfass, 'Remarks on the Vaiśeṣika concept of sāmānya', in Añjali. Papers on Indology and Buddhism. A Felicitation Volume presented to Oliver Hector de Alwis Wijesekera, ed. by J. Tilakasiri, Peradeniya 1970, pp.144f.; H. Narain, op. cit., pp.207ff.

²⁸ VS (Candra) I,1,5. Kaṇāda does not say explicitly that *buddhi* is a quality of the conscious principle or *ātman*, but it cannot be otherwise, as the very existence of the *ātman* is inferred from the perceptions, the volitions and from everything that can be attributed to a subject which does cognitive acts (cf. VS (Candra) II,2,4).

²⁹ VS (Candra) I,1,17-18.

³⁰ VS (Candra) I,2,8-17.

³¹ The term *nitya* does not correspond exactly to 'permanent', nor to 'eternal', because it refers to what can be an object of cognition without limits of time: e.g. 'being' is *nitya* because the awareness that things 'are' is not limited in time, unlike the cognition of a vessel. But as all that is *nitya* is without cause (VS (Candra) IV,1,1), we translate this word as 'eternal', following an established practice.

³² VS (Candra) I,1,7: sad anityam dravyavat kāryam kāramam sāmānyaviśeṣavad iti dravyaguṇakarmamām aviśeṣaḥ.

³³ Cf. e.g. PPB p.49 and the commentary of Śrīdhara on it.

³⁴ Cf. Candrānanda ad VS (Candra) I,1,7.

But let us now examine the role which according to Kaṇāda is played by the universals in the process of knowing. Kaṇāda says: 'From the whiteness which inheres [in the white colour], from the cognition of the whiteness comes the cognition of white; these have with each other the relation of effect and cause'.35 This sūtra has often been translated introducing the conjunction 'and' between the whiteness and the cognition of whiteness; but the conjunction is absent from the text, and not without a reason. To introduce a conjunction would mean to put the two ablatives on the same level, to present them as two concomitant causes in the cognition of white; in this way there would be two causes and one effect, and one would naturally want to know to which of the two causes the final part of the sūtra refers to. But such an interpretation is altogether wrong, as becomes clear when we sum things up: there is a substance in which the white colour, a quality, inheres; in this colour inheres the universal 'whiteness'; this universal is known before the colour; the cognition of the universal produces the cognition of the colour, the recognition of the colour as 'white'. From this series of passages two conclusions can be drawn: in the first place the ablative śvaityāt implies that the universal 'whiteness' is already present in the white colour before it is known, and it can certainly not be said that this is a conceptualist position; secondly, the universal indirectly becomes the cause of the cognition of the object itself (the commentators will say that it is an efficient cause or nimittakārana of the cognition) — the universal cannot however be at the same time the cause and the effect of a cognition!

It is clear then that, in saying that 'universal' and 'particular' depend upon cognition, ³⁶ what Kaṇāda really wanted to convey was that the same entity, the so called universal-particular, is called 'universal' or 'particular' according to the cognition it produces. This becomes evident especially if one keeps in mind the relationships between this *sūtra* and those which follow. ³⁷ The word *iti*, which in this case indicates the two possible ways of considering the same entity with respect to its functions, occurs also in another *sūtra* of Kaṇāda to express the relativity of the notions of 'small' and 'big': the same thing can be small with respect to a bigger thing, or big with respect to a smaller thing. ³⁸

³⁵ VS (Candra) VIII,9: samavāyinaḥ śvaityāc chvaityabuddheḥ śvete buddhis te kāryakāraṇabhūte.

³⁶ VS (Candra) I,2,3.

³⁷ Cf. in particular VS (Candra) I, 2, 3-5. For the correct interpretation of this sūtra, and a discussion of the problem, see H. Ui, op. cit., pp.173ff.; H.N. Randle, Indian logic in the early schools, New Delhi 1976 (1st ed. 1930), pp.133ff.; S. Bhaduri, Studies in Nyāya-Vaiśeṣika metaphysics, Poona 1975 (1st ed. 1947), pp.19f.; J. Filliozat, L'Inde classique... cit., pp.68ff.; E. Frauwallner, History of Indian philosophy, Delhi 1973 (orig. ed. Salzburg 1953-56), vol.II, pp.101ff.; G. Patti, Der Samavāya im Nyāya-Vaiśeṣika system, Roma 1955, pp.125-128; M. Biardeau, Théorie de la connaissance et philosophie de la parole dans le brahmanisme classique, Paris-La Haye 1964, p.174, n.1; R.R. Dravid, op. cit., pp.34f.; K.H. Potter, Encyclopedia... cit., vol.II, pp.133ff.; B.N. Singh, Indian logic, Varanasi 1982, pp.108ff.

³⁸ VS (Candra) VII, 1,18. H. Narain (op. cit., pp.209-210) rightly compares this relativity of notions to the father/son example of Patañjali (*Mahābhāṣya* 1,1,66; vol.I, p.172 l.6ff. Kielhorn); much less appropriate is the example, from the same source, of the cow-sāmānya and of the black-viśeṣa. But Narain is wrong in concluding that 'sāmānya and viśeṣa are relative notions and represent notional or logical categories rather than ontological ones' (p.211).

Even if from these considerations it emerges that the doctrine of the universals and of the particulars formulated by Kaṇāda has its own consistency, there are many questions left open: first of all that of the possible infinite regresses into which we fall if we admit that the universals can be inhered in by other universals (for example, by 'being-ness', or by 'universal-ness'). If a list of categories is made and to them is attributed some kind of 'being', we must specify which kind of 'being' is to be understood here. Then it is necessary to define better the nature of the 'ultimate' particular: what is its use? Why does it differ from the universal-particular? And can a particular be inhered in by a particular without an infinite regress? Lastly, we must examine the question of how the universal can be present in things, the relation between the one and the many, between eternity and temporality.

One who does not follow to the letter the teachings of Kaṇāda, according to whom the universal 'existence', the 'universal-particulars' and the 'ultimate particulars' cannot themselves be inhered in by universals and particulars, ³⁹ could posit a 'great universal' which inheres in all categories, or a special 'being' which makes it possible to say that the categories 'exist'.

During the so-called 'Dark Period' of the Vaiśesika school, which goes from Kaṇāda to Candramati and Praśastapāda, 40 these questions were debated by authors belonging to other, principally Jaina and Buddhist schools.⁴¹ The Jaina teacher Ṣaḍulūka Rohagupta (about 18 a.C.),⁴² who played a very important part in the sixth Jaina schism, introduced in his work some Vaiseşika theories, among these two classifications of the universals and of the particulars: the first distinguishes between a 'great universal' (mahāsāmaṇṇa), a universal 'being' (sattāsāmaṇṇa), a universal called 'universal-particular' (sāmaṇṇavisesasāmaṇṇa), and only one type of particulars. The second divides the universals into superior (para) and inferior (apara), and envisages also two types of particulars, called antaviseso and anantaviseso, 'ultimate particulars' and 'non-ultimate particulars'.43 In the opinion of the commentator Jinabhadra, the first classification of the universals can be interpreted in two different ways: according to the first interpretation, the 'great universal' produces the cognition of the 'category-hood' of the six categories, the universal 'being' causes the cognition of the being of the categories which 'are' (substance, quality and motion), and the universal-particular is e.g. substance-hood. According to the second, the 'great universal' produces the cognition that the first three categories 'exist', the universal 'being' is e.g. 'substance-hood' and the universal-particular

³⁹ Cf. VS (Candra) I,1,7; I,2,11; I,2,13; I,2,15; I,2,17; VIII,5.

⁴⁰ For a definition and an account of the 'Dark Period' see B.K. Matilal, Nyāya-Vaiśeṣika, vol.VI(2) of A History of Indian Literature, ed. by J. Gonda, Wiesbaden 1977, pp.59ff.

⁴¹ Cf. *ibid.*; H. Ui, op. cit., pp.1ff.

⁴² On the date of Rohagupta, see E. Leumann, 'Die alten Berichte von den Schismen der Jaina', in *Indische Studien*, 17.1895, pp.116ff.

⁴³ Cf. E. Leumann, op. cit., p.122. Further classifications are provided by certain Jaina commentaries to the work of this author, quoted by A. Thakur (op. cit., pp.6-9): they are the Āvaśyakasūtravṛtti by Haribhadrasūri (fl. 750 a.C. according to K.H. Potter, Encyclopedia... cit., vol.I, p.183), the Viśeṣāvaśyakabhāṣyavṛtti by Maladhāri Hemacandrasūri (fl. 1180 a.C. according to Potter, l.c., p.257), and the Uttarādhyayanasūtrabṛhadvṛtti by Śāntisūri (fl. 1240 a.C., cf. Potter, l.c., p.266).

is e.g. 'earth-ness' (that is, a universal inferior to substance-hood).⁴⁴ This last interpretation is less plausible than the first, but it is interesting to see how, with different classifications of the universals and the particulars, an attempt is made to solve the problems raised by their theorization.⁴⁵

Another attempt in this direction was made by Candramati in his Daśapadārthaśāstra, which has come to us only in a Chinese translation dated 648 a.C.⁴⁶ Candramati lists ten categories: 'substance, attribute, action, universality, particularity, inherence, potentiality, non-potentiality, commonness, and non-existence'. 47 Universality is the 'existence' inherent in substances, qualities and motions, is perceived by all sense-organs and is the cause of the recognition of the 'existence' of the first three categories. It is a non-product and is eternal, without qualities and motions, one and without parts.⁴⁸ Particularity exists only in each eternal substance, and produces 'the intellection of excluding others and determining the one'. It too, just like the universal, is eternal, not produced, without qualities and motions, and without parts; however, unlike 'existence', it is manifold.⁴⁹ The ninth category, translated by Ui with the term 'commonness', includes all the universal-particulars like substance-hood etc.; they have the same characteristics of eternity etc., of 'existence', but are different amongst themselves. Not every 'commonness' is perceptible in the same way: while substance-hood and motion-hood are perceived by the organs of sight and touch, quality-hood is perceived by all sense-organs.⁵⁰ So Candramati calls only 'existence' a 'universal', and, unlike Prasastapada, puts all the universal-particulars together in another category. Remarkable is in any case the admission of the direct perceptibility of the universal, a theory already maintained by Kaṇāda.⁵¹ At first sight one would say that this classification does not include a 'great universal' inherent in all the categories. But actually for Candramati it does not constitute a special category, nor a kind of universal: he confines himself to the general acknowledgement, made at the end of the work, that all the categories are knowable and at the same time the causes of their recognitions.⁵²

⁴⁴ Cf. E. Leumann, op. cit., p.122.

⁴⁵ The threefold partition of the universals has no parallel in other texts, not even in Chinese texts: cf. H. Ui, op. cit., p.36.

⁴⁶ Cf. H. Ui, op. cit., p.1. For the date of Candramati or Maticandra, cf. H. Ui, op. cit., pp.9f.; E. Frauwallner, 'Candramati und sein *Daśapadārthaśāstram*. Ein Beitrag zur Geschichte des Vaiśeṣika', in *Studia Indologica*. Festschrift für Willibald Kirfel, Bonn 1955, p.84; B.K. Matilal, op. cit., pp.62-64.

⁴⁷ H. Ui, op. cit., p.93.

⁴⁸ *Ibidem*, pp.99-100;116;173-175;219.

⁴⁹ *Ibidem*, pp.100;102;117;175;219.

⁵⁰ *Ibidem*, pp.100;118;180-183;221-222.

⁵¹ Cf. VS (Candra) IV,1,14.

⁵² Cf. Ui, op. cit., p.119 and footnote, p.224: according to Ui, the term 'knowable' represents the *jñeyatva* of Praśastapāda, and 'causes of their recognitions' includes his *astitva* and *abhidheyatva*. M. Hattori translates this passage differently: 'All the 10 categories are cognizable (*jñeya*) and nameable (*abhidheya*)' (cf. K.H.

Perhaps as a reaction to the operation attempted by Candramati and with the aim of bringing Vaiśeṣika back into the fold of orthodoxy, or simply with the aim of giving to the school a more solid doctrinal basis, Praśastapāda made with his *Bhāṣya* an impressive effort at a systematization of Vaiśeṣika. For centuries his work was better known than the *Vaiśeṣikasūtra* itself, and was the subject of a much greater number of commentaries. The reason for this success is probably to be sought in the rational order in which he arranged the doctrines of the school, an order different from that adopted by Kaṇāda; this does not however mean that he is not extremely faithful to the *sūtras*.

How does Prasastapada solve the problems raised by the theory of the universals and of the particulars? First of all by positing (if this has not been already done by Kaṇāda in the famous sūtra now considered spurious),54 that the categories are six, and only six: substance, quality, motion, universal, particular and inherence;55 all these categories have 'is-ness' (astitva), nameability (abhidheyatva) and knowability (jñeyatva). 56 Nevertheless, this 'is-ness' is not a 'great universal', which would produce an infinite regress, but a character (dharma).57 The fact that astitva, jñeyatva and abhidheyatva, notwithstanding their suffix -tva, are not universals, and that they, though not distinct from the categories themselves, belong exclusively to the six categories and not to imaginary objects, solves some of the problems raised in this connection by K. H. Potter.⁵⁸ In the text of Praśastapāda jñeyatva and abhidheyatva are not, as Potter here seems to believe, predicates of astitva. 59 However, to fully understand the statement 'astitvam jneyatvam abhidheyatvam' it is not only necessary to understand as implied the words 'all the categories have...', but it is also necessary to grasp the polemical value which this statement has with regard to Buddhists and Vedāntins, who deny that 'being' coincides with all that is knowable and nameable.⁶⁰

As 'is-ness' is defined as *dharma* or character, and not as a universal, it is necessary to explain the exact meaning of this term. According to the commentator Śrīdhara, characters are not distinct from categories (otherwise there would exist something outside the categories), but the categories themselves become, one with respect to another, character (*dharma*) or thing characterized (*dharmin*). The characters are the 'own forms'

Potter, Encyclopedia... cit., vol.II, p.281).

⁵³ Cf. E. Frauwallner, 'Candramati...' cit., pp.82f.

⁵⁴ VS (Śaṅkara) I,1,4.

⁵⁵ PPB p.15.

⁵⁶ PPB p.41.

⁵⁷ NK p.41. Note that 'character' here is used in the meaning 'trait, characteristic; essential peculiarity, nature'.

⁵⁸ Cf. 'Astitva jñeyatva abhidheyatva', in Wiener Zeitschrift für die Kunde Südasiens und Archiv für indische Philosophie, XII-XIII.1968-69, pp.275-280.

⁵⁹ Potter has later rectified his position in *Encyclopedia*... cit., p.141.

⁶⁰ Cf. R. R. Dravid, op. cit., p.7;265.

(svarūpa) of the objects, that is to say, their individuality, their special way of being. This unique and unrepeatable way of being which is the thing itself can on the one hand not produce the cognition that an object 'is', and so does not make useless the universal 'being', on the other hand it makes it possible for the universal 'being' to inhere in the object, because a universal cannot inhere in something which is absolutely not existing.⁶¹

A similar explanation is given to account for the fact that we cognize the universals and the particulars as entities which somehow 'exist'. As there can be no universal 'being' inherent in them, ⁶² but we nevertheless know them as 'existing', we must admit that their being is their own form, or that they 'exist in themselves'; ⁶³ again, the cognitions we have of their 'being' are due to the fact that we fictitiously superimpose on them the universal 'being' which does not actually inhere in them. ⁶⁴

In his classification of the universals, Prasastapāda, as we have already seen, distinguishes the universal 'being', as superior (para), from all the other universals, which are called inferior (apara), but keeps all the universals in one and the same category or padārtha. This classification is based on two criteria: the first is the extension of the 'field', 'sphere' or 'range' (viṣaya) of the universal, the second the type of cognitions which the universals produce. Viṣaya is a term difficult to translate in all its shades of meaning: in this case it indicates the whole of all the objects in which the universal is cognized, and therefore the objects in which it inheres. The universal 'being' has the largest possible field, because it inheres in all substances, qualities and motions. The inferior universals have instead a smaller range, as they inhere only in a part of the field of 'being': e.g. substance-hood inheres only in substances, and not in qualities or in motions. Every universal is everywhere (sarvagata) in its field, a fact which however raises problems when one must explain how a universal enters into something which is newly born and did not exist before, if by definition it is without motion. The inferior universal before, if by definition it is without motion.

⁶¹ Cf. NK p.42.

⁶² Cf. NK p.49.

⁶³ Cf. NK p.49: svātmaiva sattvam svarūpam yat sāmānyāmādīnām tad eva teṣām sattvam. Cf. also NK p.31: teṣām api svarūpasattāsambuddhisamvedyatvāt. Cf. Vy. p.142: svātmanā sādhāramadharmenopacāranimittena sattvam — sat sad iti pratyayajanakatvam, mukhye hy anavasthādibādhakopapatteh.

⁶⁴ Cf. NK p.49-50: kutas tarhi sāmānyādişu sat sad ity anugamaļi? svarūpasattvasādharmyeṇa sattādhyāropāt / tarhi mithyāpratyayo'yam? ko nāmāha neti / bhinnasvabhāveṣv ekānugamo mithyaiva, svarūpagrahanan tu na mṛṣā, svarūpasya yathārthatvāt.

⁶⁵ Cf. NK p.741: yat sāmānyam yatra pinde pratīyate sa tasya svo viṣayah. The term viṣaya appears only in the ṣūtrapāṭha commented upon by Śaṅkaramiśra and not in the other two versions: cf. VS (Śaṅkara) III,2,17; IV,2,1.

⁶⁶ Cf. PPB and NK pp.29-30. Playing on the different meanings of the term viṣaya, which also designates the kingdom or the lands of a monarch, Vyomaśiva explains that as a king is said to be superior (para) to another because he has a larger viṣaya, so 'being', having a larger viṣaya, is called 'superior', while the other universals, which have smaller viṣayas, are called 'inferior universals' (cf. Vy. p.55).

⁶⁷ Cf. PPB and NK pp.741-742; PPB p.43. A universal cannot move: only the substance in which it inheres can move, hence the objection of the Buddhists: tathā pinde vrajati na sāmānyasya gamanam asti niṣkriyatvāt / nāpy avasthānam pindasya tacchūnyatāprasangāt / na bhāgena gamanam avasthānam ca

The type of cognitions produced by 'being' also distinguishes it from the other universals: it only produces the cognition called *anuvṛtti*, or *anuvṛttipratyaya*, or *anuvṛttipratyaya*, and not the cognition called *vyāvṛttipratyaya*. The *anuvṛttipratyaya* is an 'inclusive' cognition or a cognition of 'identity', while the *vyāvṛttipratyaya* is an 'exclusive' cognition or a cognition of difference. The inferior universals, on the contrary, cause both types of cognitions: e.g., 'substance-hood' produces both the cognition of the identity of substances and the cognition of the diversity of the substances from qualities and motions.

According to Praśastapāda, the word 'particular', when referring to these inferior universals, is used only metaphorically ($bhakty\bar{a}$), and this use is due to the fact that they differentiate the things they inhere in from other things; in reality they belong to the category of the universals, and the primary and technical meaning of the term 'particular' is quite different.⁷⁴

But if the cognition that, for example, a substance is different from a quality (that A is different from B) is produced by the universal 'substance-hood' functioning as a 'particular', what are the 'ultimate particulars', and what is their use?

Praśastapāda says that the 'ultimate particulars' are entities present in 'ultimate' or eternal substances, namely in atoms, in the phonic space $(\bar{a}k\bar{a}\hat{s}a)$, in time, in space $(di\hat{s})$, in $\bar{a}tmans$ and in minds (manas). In each of these substances inheres an 'ultimate particular' which causes the cognition of their absolute distinction from everything else $(aty-antavy\bar{a}v_{1}tti)$. Every atom is altogether identical to the others as regards form $(\bar{a}k_{1}ti)$, qualities and motions, and the 'ultimate particular' is that by which they differ from each

niraṃśatvāt / nāpi paścād āgatyābhisaṃbadhyate pūrvaṃ tacchūnyasyānupalabdheḥ (Vy. p.682).

⁶⁸ This word occurs only in VS (Śańkara) I,2,4, but not in the other two sūtrapāṭhas.

⁶⁹ PPB p.743.

⁷⁰ PPB p.742.

⁷¹ PPB p.746.

These cognitions are the proof that universals exist (PPB p.49: sāmānyādīnām trayānām [...] buddhilakṣaṇatvam...). Vyomaśiva interprets this statement of Praśastapāda in the sense that the three categories of universal, particular and inherence are characterized by different cognitions: the universal is marked by a cognition of identity, the particular by a cognition of diversity, and inherence by the cognition 'here' (= this inheres in that). These three categories have however in common the fact of thier being marked by a certain cognition. So the word lakṣaṇa has the meaning of common 'characteristic' (cf. Vy. p.143: buddhir lakṣaṇaṃ yeṣāṃ buddhyā vā lakṣyanta iti buddhilakṣaṇās teṣāṃ bhāvo buddhilakṣaṇatvam). For Śrīdhara, on the contrary, in this passage of Praśastapāda lakṣaṇa has the meaning of proof, of means for ascertaining the existence of something (pramāṇa): Praśastapāda, Śrīdhara says, wants to emphasize the fact that, while the reality of substances, qualities and motions is ascertained also by other means of proof, i.e. by their effects, the reality of universals, particulars and inherence can be proved only from the cognitions they produce. Śrīdhara then mentions the opinion of Vyomaśiva and rejects it, saying that if the cognition were only a characteristic and not a proof, this would not differentiate the last three categories from the first three, because substances, qualities and motions too have cognitions peculiar to them (cf. NK p.50).

⁷³ Cf. PPB p.746.

⁷⁴ Cf. PPB p.747.

other. 'Ultimate particulars' are also by what, for example, liberated ātmans and minds remain distinct from each other. 75

But no eternal substance is directly perceptible: each is inferred by its effects, just as the *prakṛti* of the Sāṃkhya school. Who then will be able to perceive the absolute difference existing, for example, between two earth atoms? According to Praśastapāda such a knowledge belongs exclusively to the *yogins*. Nevertheless, he confesses that he is not himself a *yogin*, and therefore, implicitly, that he has no empirical knowledge of the particulars.⁷⁶

How is this Vaiseşika theory of the universals and particulars made use of by the authors of medical texts?

The Carakasaṃhitā and its commentary Āyurvedadīpikā by Cakra have often been interpreted in the light of what S.N. Dasgupta wrote on them. According to this scholar, in the Carakasaṃhitā sāmānya and viśeṣa 'have a significance quite different from what they have in the Vaiśeṣikasūtras': in Vaiśeṣika the 'word sāmānya means a class concept', while in Caraka it means 'the concrete things which have similar constituents or characteristics', and the viśeṣas, which for Vaiśeṣika are the 'ultimate specific properties differentiating one atom from another', in Caraka come to mean 'concrete things which have dissimilar and opposite constituents or characteristics'. What in Vaiśeṣika had only a conceptual value, in Caraka comes to have an extremely important practical function: 'Substances having similar constituents or characteristics will increase each other, and those having dissimilar constituents or characteristics will decrease each other'.

Now, it is true that Caraka introduces certain adjustments in the Vaiśeṣika theory of the universals and of the particulars, but these are not exactly the ones pointed out by Dasgupta. Again, a correct approach to the problem is impossible if we do not exclude right from the beginning the conceptualistic interpretation of Kaṇāda.⁷⁸

In the first place, it is necessary to carefully ascertain if the terms $s\bar{a}m\bar{a}nya$ and $vi\acute{s}e\acute{s}a$ are used in the $Carakasamhit\bar{a}$ with a technical meaning or with their literal meaning: ⁷⁹ if they are used with a technical meaning, they would correspond respectively to the fourth and fifth category of Prasastapāda; if, on the contrary, they are employed with their literal meaning, the word $s\bar{a}m\bar{a}nya$ would mean a similarity ($sam\bar{a}natva$) and $vi\acute{s}e\acute{s}a$ a difference. There is, however, an easy way to distinguish a 'similarity' from a 'universal', and a 'difference' from an 'ultimate particular': while a 'universal' is present only in objects belonging to one and the same category, for example in two substances or in two qualities, a 'similarity' exists also in objects belonging to different categories, such as a substance and a quality; and while a 'particular', the $antyavi\acute{s}e\acute{s}a$ of Prasastapāda, is present only in eternal substances, a 'difference' exists also in other types of objects.

⁷⁵ Cf. PPB pp.766-768.

⁷⁶ PPB pp.767-769.

⁷⁷ S.N. Dasgupta, op. cit., vol.II, p.371; cf. also H. Narain, op. cit., p.110.

⁷⁸ Cf. supra.

⁷⁹ For this distinction, see S. Bhattacharya, 'The Nyāya-Vaiśeṣika doctrine of qualities', in *Philosophy East and West*, 11.1961, p.145, n. 9.

Secondly, if the term viśeṣa does not simply convey a difference between two objects, we must establish if it is used in the sense which Praśastapāda calls metaphorical, i.e. to designate the 'universal-particulars', such as 'substance-hood', or in its primary sense, to denote the 'ultimate particulars'.

In any case it must be pointed out that the use of the words sāmānya and viśeṣa in their literal meaning is amply attested already in the Vaiśeṣikasūtras, so it is not something foreign to the tradition of Vaiśeṣika.⁸⁰

The most important passages of the *Carakasaṃhitā* discussing the universals and the particulars are three: in the first the six categories of Vaiśeṣika are listed, in the second universals and particulars are described according to their causality, and in the third they are defined through characteristics useful in medicine. Now in the first of the passages under consideration the terms sāmānya and viśeṣa are undeniably used in their technical meanings, and not in the sense of 'similarities' and 'differences', because we find them in the list of the six Vaiśeṣika categories; it is however odd that these categories should have been listed in an order which is different from the 'classical' one: universals come first, followed by particulars, qualities, substances, motion or action, and finally inherence. Universals and particulars should have occupied the fourth and the fifth place in the list, but Caraka puts them in the first and in the second place.

Cakra does not explain this passage immediately, but says he will do it later while commenting on the stanzas containing the definition of each category.⁸³ In fact, when Cakra does introduce the first of these stanzas, he tries to justify the fact that Caraka describes the universal before the other categories, saying that this is due to the fact that it has been mentioned first in the list of all the categories, and that etiology, symptomatology and therapeutics, the knowledge of which must be acquired through Ayurveda, all have as their basis the knowledge of the universals.⁸⁴

⁸⁰ Cf., for sāmānya, VS (Candra) I,1,17; I,1,22; I,1,24; I,1,29; II,1,6-7 etc.; for viśeṣa, VS (Candra) I,2,17; II,1,30; II,2,13 etc. Narain has used some of these passages and also others to maintain that in the Vaiśeṣikasūtra the word sāmānya does not have the fixed technical meaning of universal (op. cit., p.179); however it often happens in philosophical texts that the same word is used sometimes in a technical sense, and sometimes in a literal sense (e.g. the terms artha, rūpa, etc. in the sūtras), so this does not necessarily indicate a primitive and ambiguous stage of the doctrine.

⁸¹ Cf. CS Sūtra I,28; CS Sūtra I,44; CS Sūtra I,45.

⁸² Cf. CS Sūtra I,28b-29a: sāmānyam ca višeṣam ca guṇān dravyāṇi karma ca // samavāyam ca...; PPB p.15. Even if we reject as spurious the sūtra containing the list of the categories (VS (Śaṅkara) I,1,4), it is remarkable that in the sūtras the single categories are discussed according to the order followed by Praśastapāda in his list (cf. VS (Candra) I,1,4ff.).

⁸³ Cakra ad CS Sūtra I,27-29.

⁸⁴ Cakra ad CS Sūtra I,44; cf. CS Sūtra I,24. In this passage of his commentary Cakra mentions only the universal and not the particular, because, as the latter is nothing else but the universal-particular, it is included in the universals (cf. infra).

Caraka then describes universals and particulars as follows: 'The universal is always a cause of increase for all things, and the particular is a cause of decrease; but the function is of both'.⁸⁵

Commenting on this passage, Cakra observes that with 'things', substances, qualities and motions are meant. Then he rectifies and rejects some possible interpretations of this sentence of Caraka. According to the first interpretation, it is the universal itself, as such, which, in the form of *jāti*, 'genus', increases things. Now the actual definition of the universal is not the phrase 'cause of increase', but, as Caraka will say in the next passage, 'that which produces unity (*ekatva*)'. The universal is called 'cause of increase' because it is that which serves as a signal, indicator or mark (*laksaṇa*) of the actual cause of increase, which can be a substance, a quality or a motion. ⁸⁶

Cakra also says that, as a point of fact, if a universal were always as such a cause of increase, we would have the absurd consequence that all the things in which that universal inheres would increase automatically; e.g., if the universal 'flesh-ness/meat-ness' (māṃsatva) always caused an increase, as it resides both in the meat we eat (which is the cause of increase) and in the flesh which is an element of the body (which is that which is increased), we would always have an increase also in those who do not eat meat, because the universal 'flesh-ness/meat-ness' inheres in their own flesh too (and Caraka says that the universal is always a cause of increase for all things). But we observe that this is not the case; therefore the sāmānya is said to be 'cause of increase' in the sense that it is an indicator or mark of such a cause. To confirm his reasoning Cakra quotes a sentence from Praśastapāda, which says that the three categories of the universals, of the particulars and of inherence can be neither effects nor causes.⁸⁷

Cakra then takes for examination the point of view of those who maintain that in this passage the term $s\bar{a}m\bar{a}nya$ has the meaning of the adjective 'similar' ($sam\bar{a}na$): according to them it does not mean a universal, but an object (substance, quality, motion) similar to another object. This is the interpretation of Dasgupta himself, and it is interesting to see how it was already foreseen and rejected by Cakra. For those who adopt this point of view must reckon with the list of categories mentioned by Caraka, in which the word $s\bar{a}m\bar{a}nya$ is undeniably used with a technical meaning: from this follows the necessity of admitting also, absurdly, that the universal is mentioned only in $s\bar{s}utra$ I, 28 and nowhere else in the treatise.

Cakra rejects this thesis with two arguments: the first is based on the fact that the logical connection between the different subjects expounded (saṃbandhārtha) is a

⁸⁵ sarvadā sarvabhāvānām sāmānyam vṛddhikāranam / hrāsahetur viśeṣaś ca, pravṛttir ubhayasya tu // (CS Sūtra I,44).

⁸⁶ Cakra ad CS Sūtra I,44.

⁸⁷ Cf. ibidem and PPB p.49. The example of meat/flesh has been chosen by Cakra because it appears also elsewhere in the text (CS Śārīra VI,10), and because meat is considered by Āyurvedic physicians to be the most nourishing kind of food (cf. CS Sūtra XXVI,87; F. Zimmermann, La jungle et le fumet des viandes, Paris 1982, passim).

⁸⁸ Cakra ad CS Sūtra I,44.

⁸⁹ Ibidem.

requisite essential to every treatise worth being read and studied. If we admit that Caraka has used the term $s\bar{a}m\bar{a}nya$ in different places with different meanings, we can no more believe in the logical consistency of the author. It follows that we must always give to $s\bar{a}m\bar{a}nya$ the same technical meaning, and consequently interpret the expression 'cause of increase' as a character (*dharma*: another occurrence of Vaiśeṣika terminology) useful as a description of the universal in a medical context; the actual definition of the universal will, in fact, be given in the stanza immediately following, i.e. in $S\bar{u}tra$ I,45.

The second argument is based on the correspondence existing between the way in which universals and particulars are dealt with, and the way in which the other categories are dealt with. After having listed the six categories, Caraka, even though not always in the same order in which he mentioned them for the first time, explains and defines all six of them. For example, substance, after having been mentioned as fourth in Sūtra I,28, is described after the universals and the particulars in Sūtra I,48, and defined in Sūtra I,51; the same procedure is followed for the other categories. Consequently, it cannot possibly be thought that the term sāmānya is not used by Caraka in a technical sense.

Someone however could object that the interpretation of Cakra is not compelling because the universal does not always mark a cause of increase: there are cases in which two substances have the same quality, and still the quality of the first does not increase that of the second. To avoid this difficulty, Cakra explains that the universal is not always a 'cause' of increase in the sense indicated above: it is a 'cause' only when there is no antagonistic cause; e.g., the acidity of the *āmalaka*⁹³ does not increase the acidity of the *pitta* because of its 'specific power' (*prabhāva*)⁹⁴ antagonistic to coldness.⁹⁵

Another objector could say that not only is the universal not always a 'cause' of increase, but there are also other causes of increase besides the universal. But Caraka, says Cakra, is in no way maintaining that only the $s\bar{a}m\bar{a}nya$ is a 'cause' of increase; a thing can also increase another thing with which it has nothing in common by its $prabh\bar{a}va$: for example, ghee (ghrta) increases the intellectual power $(medh\bar{a})$ and the fire of the organism to which it has no similarity at all, and too much thinking about something $(cint\bar{a})$ increases the $v\bar{a}ta$.

Having shown that the sāmānya is not the only cause of increase, Cakra introduces the Ayurvedic concept of viśeṣa by pointing out that when Caraka says that 'the universal is

⁹⁰ Cf. e.g. AS *Sūtra* I,20.

⁹¹ Cf. Cakra ad CS Sūtra I,44.

⁹² Ibidem.

⁹³ Emblica officinalis Gaertn., syn. Phyllantus emblica Linn. (cf. R. N. Chopra [et al.], Glossary of Indian medicinal plants, New Delhi 1986, reprint, vol.I, p.106).

⁹⁴ For an explanation of the concept of prabhāva, cf. P.V. Sharma, Introduction to dravyaguṇa, Varanasi 1976, pp.53-55; Id., Dalhaṇa and his comments on drugs, New Delhi 1982, pp.98-100; G.J. Meulenbeld, 'Reflections on the basic concepts of Indian pharmacology', in Studies in Indian medical history, ed. by G.J. Meulenbeld and D. Wujastyk, Groningen 1987, pp.1-17.

⁹⁵ Cakra ad CS Sūtra I,44.

⁹⁶ Ibidem.

always a cause of increase for all things', one should understand as implied the word samānasya, meaning that something increases something else only if they are 'similar', samāna, to each other, i.e. only if they have the same sāmānya; if they have different sāmānyas, the sāmānya does not function any more as a 'universal', but as a 'particular', as a viśeṣa. With respect to blood, for example, 'meat-ness' is not a 'universal', but a 'particular'. We shall see later that the fact that meat increases the amount of blood is not due to the sāmānya inhering in the substance 'meat', but rather to the sāmānya inhering in their respective qualities.

But then what about the 'ultimate particulars' of Vaiśeṣika?

According to Cakra the *antyaviśeṣa*s are perfectly useless, so when Caraka talks of 'particulars', he is actually referring only to the 'universal-particulars' when they produce distinctions; for example, 'gavedhuka⁹⁸-ness' (gavedhukatva) is a universal; but the very same gavedhukatva is a particular with respect to meat and to all the objects different from the plants of gavedhuka. By its universal-particular gavedhukatva, the same plant of gavedhuka will be 'similar' (samāna) to other plants of gavedhuka, and will be different from meat, as in meat there is no universal gavedhukatva.⁹⁹

The particulars 'cause' a decrease in the same sense in which universals 'cause' an increase: they 'mark' the substance, the quality or the motion which causes the decrease, and, just like the universals, they carry out their function only in the absence of an antagonistic cause: for example, the *mandaka*, ¹⁰⁰ the *nikuca*, ¹⁰¹ and other substances which are unctuous, etc., even though they are antagonists of *vāta* and of other pathogenic elements, do not alleviate them, because of the noxious *prabhāva* of these substances. ¹⁰²

It could be objected to Cakra that the particular does not always mark the cause of a decrease: if, for example, we take two different diuretics, one will not necessarily be antagonistic to the other, even though a *viśeṣa* will make it possible to distinguish them; so diversity is not always synonymous with opposition, and, as such, 'cause' with decrease.

The explanation Cakra gives of the particular is especially aimed at making this point clear. In the Ayurvedic context viśeṣa means an 'antagonistic particular' (viruddhaviśeṣa) because the texts mention only this particular as the 'cause' of decrease: (the two?) Vāgbhaṭa(s), Caraka himself and Jatūkarna speak of contraries, or of 'opposed qualities and substances', as 'causes' of decrease. 103 So, according to what Cakra himself says,

⁹⁷ Ibidem.

⁹⁸ Coix lachryma-jobi Linn. (R. Chopra [et al.], op. cit., p.73).

⁹⁹ Cakra ad CS Sūtra I,44.

¹⁰⁰ A kind of yoghurt (dadhi) not completely mature and noxious to the doṣas, obtained by a slow process of curdling (cf. CS Sūtra XXVII,228; Cikitsā XXI,18).

¹⁰¹ Artocarpus lakoocha Roxb. (cf. T.B. Singh and K.C. Chunekar, Glossary of vegetable drugs in Bṛhattrayī, Varanasi 1972, pp.224;346;351).

¹⁰² Cakra ad CS Sūtra I,44.

¹⁰³ Ibidem. Cf. AS Sūtra I,32; AH Sūtra I,13; CS Sūtra I,59 and 62; Jatūkarņa, cit. by Cakra ad CS Sūtra I,44.

the non-antagonistic particular (aviruddhaviśeṣa) is a 'cause' neither of decrease nor of increase. However, there are cases in which the simple use of a certain substance dissimilar from another, even though it is not antagonistic, indirectly causes a decrease of the second substance, if the latter in the meanwhile wears out and is not reintegrated, just as building a dam causes a diminution in the water flowing below. Caraka, saying in a general way that a particular is a cause of decrease, means to include also the decrease which takes place using a non-antagonistic viśeṣa. 104

Someone may ask, however, if universals and particulars are 'causes' of increase and decrease also when taken by themselves, independently of their relation to other things, or not. According to Cakra, the answer of the *Carakasamhitā* is negative, and is expressed by the words 'but the function (*pravṛtti*) is of both'. These words, according to the commentator, can be interpreted in two ways: either by supplying the word 'cause', or by supplying the word 'effect'. In the first case, the *pravṛtti* of the universals and of the particulars is their connection (*abhisaṃbandha*) with the body: 'Such *pravṛtti* of the universals and of the particulars of bodily constituents is the cause of increase and of decrease'. The word 'but' indicates that this last statement has the sense of a limitation: the universals and the particulars which have no relation to the body do not 'produce' their effects, obviously from a medical point of view. The supplying the word increase and of the particulars which have no relation to the body do not 'produce' their effects, obviously from a medical point of view.

In the second case, on the contrary, *pravrtti* means the balance of the bodily constituents (*dhātusāmya*): this balance is an 'effect' both of the universals and of the particulars. Taking in exclusively substances of a certain kind brings about an abnormal increase of the bodily constituents similar to them, and so an imbalance of the *dhātus*; the contrary happens through taking in only substances dissimilar. Balance is achieved by taking in at the same time substances which are similar and dissimilar to one's bodily constituents.¹⁰⁸

Finally, Caraka gives the definition of universals and particulars with these words: 'The universal produces unity, while the particular produces separation; the fact of having the same *artha* is the universal, while the particular is the opposite'. ¹⁰⁹

Commenting upon the first half of this stanza, Cakra remarks that the universal produces unity in the sense that it produces the cognition (buddhi) of unity. When different individuals of the same kind, e.g. cows, are perceived at different times and places, one thinks: 'This is a cow; but that is also a cow'; and this knowledge, which, though referring to different individuals, is uniform (ekākārā buddhi), has for its cause

¹⁰⁴ Cakra ad CS Sūtra I,44.

¹⁰⁵ Sūtra I,44.

¹⁰⁶ Cakra ad CS Sūtra I,44.

¹⁰⁷ Ibidem.

¹⁰⁸ Ibidem.

¹⁰⁹ sāmānyam ekatvakaram višesas tu pṛthaktvakṛt | tulyārthatā hi sāmānyam višesas tu viparyayah || (CS Sūtra I,45).

the universal. If one and the same universal did not exist in different individuals, we could not have a correct uniform knowledge of these.¹¹⁰

Even the recognition of several people as cooking, or of several things as white, is due to the universals inherent in the actions (or motions) of cooking and in the qualities (white colour) of the substances. The actions performed by different people while cooking cannot be exactly the same, nevertheless they are recognized as being 'of the same kind' because the universal which inheres in them is the same. It is the universal which inheres in the different actions which causes the cognition of their unity. 111

The particular is defined, on the contrary, as that 'which produces separation', which causes the cognition that a thing is different from another. As he has already pointed out while discussing gavedhukatva, Cakra remarks that one and the same universal can be viewed either as a universal or as a particular, depending upon the cognitions it produces: cow-ness will be a universal relative to cows, but a particular with respect to horses, because it is that which causes the cognition of the difference of cows from horses and other animals.¹¹²

How does this theory work in Āyurveda? 'Meat-ness' will be a 'cause' of increase with respect to flesh, because meat (māṃsa) is 'similar' to flesh (māṃsa), while it will be a 'cause' of decrease — when functioning as a particular — with respect to the vāta; but it will not be a 'cause' of decrease with respect to blood and other substances, because it is not an antagonistic viśeṣa; it will rather work as a factor of increase of blood, through the universal which inheres both in its qualities and in those of blood. This means that a diet based on meat will increase fleshy tissues and the amount of blood of the patient respectively by the universals of the substance and of the qualities; but it will decrease the vāta by the viśeṣa 'meat-ness' which is antagonistic to the vāta.

In the interpretation of Cakra, the second half of the stanza of Caraka already quoted (note 109) is meant to explain how the universal invariably produces, with reference to several objects, the same cognition, or, if functioning as a 'particular', the cognition of their difference. The fact of having one and the same cognition (*ekabuddhi*) of several objects is accounted for by their having the same *artha*, or universal, while the cognition of difference is accounted for by the fact that the objects have disparate universals, in which case the universals function as 'particulars'.¹¹⁴

The stanzas of Caraka on universals and particulars have also been interpreted in other ways: Cakra quotes and refutes several other authors. One of them says that there are three types of universals and particulars: those which have as their sphere (gocara) substances, those inherent in qualities and those inherent in motions. According to this threefold partition, the 44th stanza of this chapter of the Carakasamhitā refers to the universals of substances, 45ab refers to the universals of qualities and 45cd to the universals of motions. This classification is rejected by Bhaṭṭāraharicandra, for whom all the three

¹¹⁰ Cakra ad CS Sūtra 1,45.

¹¹¹ Ibidem.

¹¹² Ibidem.

¹¹³ Ibidem.

¹¹⁴ Ibidem.

types of sāmānya are mentioned only in stanza 44 (but if this were the case, Cakra remarks, the second stanza would become useless). According to a third point of view, 44 is about the absolute sāmānya (atyantasāmānya), the first half of stanza 45 is on the middle sāmānya (madhyasāmānya), and the second half of stanza 45 is about the particular (ekadeśasāmānya); but this classification, says Cakra, is not very useful and is hardly consistent. Finally, there are some who believe in the existence of two kinds of universal: one 'existing in both [objects]' (ubhayavrtti) and one 'existing in only one [object]' (ekavrtti). A universal 'existing in both [objects]' is e.g., 'meat-ness', because it inheres both in that which nourishes (meat) and in that which is nourished (flesh); the universal 'existing in only one [object]' is meant to explain how certain substances, as for example ghee, have the power to increase a dissimilar bodily element, such as organic fire, or how running can increase the $v\bar{a}ta$, or again how sleeping can increase the kapha. In all these cases, that which increases is not similar to that which is increased, but works by its 'specific power'. This power is nothing but a universal 'existing in only one [object]', such as 'ghee-ness', 'running-ness' etc.; so it can be said that the universal is the 'cause' of increase even when it increases dissimilar things. Cakra however rejects this thesis, pointing out that a universal which does not inhere in both objects should properly be called a particular; if we were to admit the existence of a universal 'existing in only one [object]', both similar and dissimilar things would be causes of increase, and so there would be no point in speaking of universals. But according to the Carakasamhitā, the universal is definitely a 'cause' of increase, and this is the reason why this peculiarity is used to describe it; however the universal is not said to be the only cause of every increase, so there is nothing wrong in maintaining that an increase can be produced also by dissimilar things. 115 The difference between the position of the opponent and that of Cakra is rather subtle: Cakra considers the 'causality' of universals to be a general rule which is not without exceptions, while the reasoning of the opponent, who does not accept these exceptions, ends up by abolishing all distinction between similar and dissimilar objects, thereby making useless the theory of the universals and the statements of Caraka meaningless.

Other opponents quoted by Cakra point out some difficulties one meets if one makes use of the universals in medicine: it is easy to speak of universals inherent in substances and qualities, but it is much harder to explain how the universal of an action can 'cause' the increase of an element of the body. It is an established fact in Ayurveda that running, and generally all kinds of physical exercise, increase the *vāta*; but what have running and *vāta* in common? Evidently it is not by chance that Caraka himself has mentioned the universal of substances¹¹⁶ and of qualities,¹¹⁷ but not that of motions; it is true, Caraka has said that motion is a cause of increase, but he has added nothing relating to universals.¹¹⁸

To this objection Cakra answers by stating that in the passage on motions there is no mention of universals because most kinds of motion produce an increase by their 'specific

¹¹⁵ Ibidem.

¹¹⁶ CS Śārīra VI,10.

¹¹⁷ CS Śārīra VI,11.

¹¹⁸ CS Śārīra VI,11; Cakra ad CS Sūtra I,45.

power'. This does not mean that the universal of motions does not exist; in fact $v\bar{a}ta$, which is provided of motion, is increased by a body which does some motion, some exercise, and is on the contrary decreased by motionlessness. As regards sleep, even if in the treatise of Caraka it is not defined as an 'action', 119 it is called an action conventionally. In reality sleep is not the immediate cause of an increase of kapha, but it is considered to have this effect because it stops the motions of the body which would produce a decrease of kapha. However, remarks Cakra, when no other cause can be thought of, one must resort to the 'specific power' or $prabh\bar{a}va$. 120

Another objection points out a logical inconsistency in the theory of the universals: to one and the same entity, the universal-particular, are attributed at the same time opposite effects. Meat for example by its universal 'meat-ness' increases the flesh, and by its particular (the same 'meat-ness') decreases the $v\bar{a}ta$. But this is impossible: the same individual cannot at the same time be the subject of two actions which are incompatible with each other; Devadatta cannot be making an arrow at the same time that he is making a pot!¹²¹

Cakra answers that this applies only to things which are *kriyāvat* (i.e. when the effects are caused by actions or motions), not to things which are *akriyāvat*: e.g., a sound produces at the same time many other sounds (in all directions), and fire produces at the same time light and heat; this thesis is confirmed, moreover, by Caraka himself, according to whom one and the same medicine, taken properly, brings into balance the bodily constituents which are lacking or in excess.¹²²

Finally, the last objector doubts that the rules stated by Caraka are always valid: there are cases in which the universal *is not* a 'cause' of increase. Let us take the case of an old man, whose bodily constituents are wearing out, or of a very sick man: even if they nourish themselves on foods which have the same qualities as their bodies, that nourishment will not make them any fatter. Another exception to the rule can occur because of seasonal factors: in summer honey and other substances do not cause an increase of *kapha* even if they are 'similar' to it.¹²³

To answer this objection, Cakra returns to what he has already stated previously: in certain circumstances the universal is not the 'cause' of increase because there are obstacles which prevent it (old age, a serious illness, summer heat etc.). So the final thesis is the following one: in the absence of antagonistic factors, the universal is the 'cause' of increase. 124

¹¹⁹ On 'action' and 'motion' cf. note 11.

¹²⁰ Ibidem. The statement of this general rule makes clear the function of prabhāva in Āyurveda: it is a kind of deus ex machina which is made to intervene every time the theoretical framework appears unable to provide an adequate explanation of reality. In Vaiśeṣika physics the function is played by the adṛṣṭa, which explains magnetism and other singular phenomena (cf. VS (Candra) V,1,15).

¹²¹ Cakra ad CS Sūtra I,45.

¹²² Cf. ibidem and CS Śārīra VI,6.

¹²³ Cakra ad CS Sūtra I,45.

¹²⁴ Ibidem.

Sometimes, using this theory in Āyurveda, it happens that one speaks incorrectly of substances which increase the qualities of the body, or of qualities which increase substances, such as the bodily constituents. For example, we could say that drinking milk increases the coldness of the body, or that the lightness of a drug increases the *vāta*. If this language were not improper, it would be meaningless to speak of universal-particulars, because these are confined in their workings to each category (substances, qualities and motions).

To avoid this difficulty, Cakra says that 'the universal of substances it is which 'increases' the bodily constituents, which are substances, not the universal of qualities, because qualities cannot produce substances'. If we have a certain dry $(r\bar{u}k\bar{s}a)$ plant called $citraka^{126}$ which, e.g., increases the pathogenic element $v\bar{a}ta$, we cannot say that its dryness (which by definition is a quality of the $v\bar{a}ta$) has increased the $v\bar{a}ta$: we must infer from the dryness of the citraka the presence in it of $v\bar{a}ta$, and conclude, through the universal ' $v\bar{a}ta$ -ness', that the substance $v\bar{a}ta$ has increased the $v\bar{a}ta$ in the body. It is somewhat complicated, but it is the only way to apply to all cases the theory of the universals.

Notwithstanding his evident effort for accuracy, Cakra says that for fear of being prolix he has discussed the problem of universals and particulars taking into consideration only their use in medicine, and refers to the Vaiśeṣika literature for a fuller treatment of the subject. 129

From an examination of the texts of the *Carakasanhitā* and its commentary $\bar{A}yurvedad\bar{t}pik\bar{a}$, compared with the oldest Vaiśeṣika literature, we can draw certain conclusions, which in part contradict and in part confirm what Dasgupta says. ¹³⁰

First of all, in the *Carakasaṃhitā* the terms *sāmānya* and *viśeṣa* have a technical meaning and do not convey simply the ideas of similarity and difference. Now, whilst the Āyurvedic *sāmānya* is no doubt the universal of Vaiśeṣika, and therefore the fourth category in the list of Praśastapāda, the *viśeṣa* is not the 'ultimate particular', which represents the fifth category of Praśastapāda, but is rather the universal-particular in its differentiating aspect. The term *viśeṣa* occurs frequently with this shade of meaning already in the *Vaiśeṣikasūtras*, ¹³¹ while, as we have seen, Praśastapāda attaches great importance to pointing out that the universal-particulars are called *viśeṣas* only metaphorically, so as to avoid that the universal-particulars should form a category by themselves,

¹²⁵ *Ibidem* and VS (Candra) I,1,8; I,1,9; I,1,15.

¹²⁶ Plumbago zeylanica Linn., or Plumbago rosea Linn. (cf. T.B. Singh and K.C. Chunekar, op. cit., pp.156-157).

¹²⁷ CS Sūtra 1,59.

¹²⁸ Cakra ad CS Sūtra I,45.

¹²⁹ Ibidem.

¹³⁰ Cf. supra.

¹³¹ Cf. e.g. VS (Candra) I,2,3.

as in Candramati's work¹³² On the other hand, as remarked by Cakra, the 'ultimate particulars' have no practical use in medicine, and this is the reason why the term $vi\acute{s}e$ ça in the $Carakasanhit\bar{a}$ means only the universal-particular.¹³³

It is true that the *Carakasaṃhitā* formulates the definition of the universals and of the particulars in a way which differs from that of the *Vaiśeṣikasūtras*: by means of metonymies and ellipses it points out the gnoseological function, at once unifying and differentiating, of the universal-particulars, rather than deducing their existence. This leads us to think that the *Carakasaṃhitā* takes for granted the demonstration of the universals made by Kaṇāda, and that one should not speak of dependence of the latter on medical texts, contrary to what D. Chattopadhyaya says.¹³⁴

Nor is it possible to say that the categories have arisen in a medical milieu because they are 'absolutely essential for the theoretical basis of Ayurveda': 135 in the other fundamental medical texts the theory of the universals and of the particulars is not used at all. The Suśrutasamhitā mentions neither universals and particulars, nor similarities and differences, in the first chapter of the Sūtrasthāna, the place where one normally expects to find the most important principles of the work. This absence is rather meaningful; clearly for Suśruta, a surgeon, the principle explaining the effects of medicines has less importance than for the physician Caraka. Nonetheless, even from a surgeon one would expect at least some hint on the fact that similar substances increase similar substances, but at the beginning of his work Suśruta does not dwell upon philosophical considerations: he defines substances as the substrates of tastes, and as drugs. 136 Even a term like samavāya, which in Vaiśeṣika means inherence, is used by him in a generic way to indicate the union of the elements which make up the human body.¹³⁷ Elsewhere Suśruta says that the remedy to a pathological decrease of pathogenic elements (dosa), of bodily constituents ($dh\bar{a}tu$) and of impurities (mala) consists in that which has the same cause¹³⁸ (svayoni) of the element which is wanting and increases it (vardhana).¹³⁹ Cakra explains that the word vardhana has been added to svayoni in the first place to exclude those things which, though having the same cause as the lacking element, do not increase it, and secondly to include all the things which increase it by

¹³² Cf. supra.

¹³³ Cakra ad CS Sūtra I,44.

¹³⁴ Cf. D. Chattopadhyaya, op. cit., p.142 and passim.

¹³⁵ *Ibidem*, pp.25;140.

¹³⁶ SS *Sūtra* I,28.

¹³⁷ SS *Sūtra* I,22.

¹³⁸ For 'cause' as a rendering of yoni, cf. e.g. Tārānātha Tarkavācaspati, Vācaspatyam, Varanasi 1969-1970 (1st ed. 1873-1884), vol.VI, p.4782: yoni = kāraṇa, the commentaries of Palhaṇa — svayonivardhanānīti svayonir ātmahetuḥ; tatra vāyor vāyur eva hetuḥ etc. — and Cakra — see note 140 — on SS Sūtra XV,8, and of Palhaṇa on SS Sūtra XLII,6: svayonivardhanā iti yebhyaḥ kāraṇebhyo madhurādayo rasā utpadyante tāni vardhayantīty arthaḥ.

¹³⁹ SS *Sūtra* XV,8.

their *prabhāva*, and not because they have the same cause. ¹⁴⁰ Tastes increase their own cause and make a different cause decrease: for example, the cause of *kapha* is water, but sweet taste too has water as its cause; therefore, if an ill man shows the symptoms of an abnormal diminution of *kapha*, such as burning sensations, thirst, insomnia, etc., he will have to eat sweets, i.e. foods whose taste has the same cause as the element which is wanting. But he will have to take care and be sure that those foods are natural 'increasers' of *kapha*, because they could also decrease it or leave it as it is, because of their *prabhāva*. ¹⁴¹

In other places Suśruta uses the terms 'antagonistic' (viruddha) and 'similar' (samāna: compounded with yoni it becomes a synonym of svayoni), ¹⁴² but it is clear that they do not receive the same marked technical connotation which sāmānya and viśeṣa have in Caraka's work.

The 'similar' reappears in the Aṣṭaṅgahṛdaya and in the Aṣṭaṅgasaṇgraha, two works which attempt a reconciliation between the doctrines of their predecessors and a reorganization of Āyurvedic knowledge. 143 The place where the subject of 'increase' is expounded is the same as in Caraka, i.e. the first chapter of the Sūtra; this means that great importance is attached to it. But here the place of the universal is taken by the 'similar', and that of the particular by the 'contrary [of the similar]', i.e. by the dissimilar. The stanza is the same in both Vāgbhaṭa-texts: 'The increase of all [things is produced] by the similar, the contrary by the opposite'. 144 Furthermore, the list of the categories of Vaiśeṣika, which, according to Caraka, had been 'seen with the eye of knowledge' by the great ṛṣis thanks to the teachings of Bharadvāja, is completely absent: all that the sages learn from the god Indra is the Āyurveda in eight parts. 145

On the reasons which have led the Aṣṭāṅgasaṅgraha and Aṣṭāṅgahṛdaya to leave out universals and particulars from their expositions we can only offer a hypothesis: perhaps the main reason was a certain detachment from Vaiśeṣika metaphysics caused by a desire for a more empirical perspective, nearer to common sense and to the practical necessities of physicians and patients. From this point of view it becomes easier to understand why the Vaiśeṣika terms and concepts of substance, quality and action are still employed, even if with a less philosophical connotation than in Caraka, while univer-

¹⁴⁰ SS p.68, note 6.

¹⁴¹ Cf. SS Sūtra XLII,6; SS Sūtra XV,7-8 and the commentary of Dalhaṇa; SS Sūtra XLII,3ff.

¹⁴² Cf. SS Sūtra XV,17; XLII,8,(1)-(3).

¹⁴³ Cf. AS Sūtra I,18 and 20.

¹⁴⁴ Cf. AH Sūtra I,14a and AS Sūtra I,32a: vṛddhiḥ samānaiḥ sarveṣāṃ viparītair viparyayaḥ. The AS has already mentioned the increase and decrease in the first stanza devoted to the exposition of the Āyurvedic doctrine (Sūtra I,21b), while this hemistich is wanting in the AH, which speaks of decrease for the first time in Sūtra I,12.

¹⁴⁵ Cf. CS Sūtra I,27-29; AH Sūtra I,3; AS Sūtra I,5-10.

¹⁴⁶ Cf. Indu ad AS Sūtra I,32a.

sals, particulars and inherence are overlooked. It is clearly the intention to highlight and to define right from the beginning the concepts which are specifically medical, such as $v\bar{\imath}rya$, $vip\bar{a}ka$, etc., which in the works of previous authors were not explained at the beginning of their treatises. It

The two main commentators of the Vagbhata-texts offer different justifications for the passage in which the 'similar' substitutes the universal. According to Indu, the problem is not so much that Vāgbhata speaks of things similar instead of universals, because from the Ayurvedic point of view 'there is no difference between similar and universal, as without a single form even similarity is impossible': 149 the real difficulties appear when one realizes that the major universals, such as substance-hood or 'being', cannot explain increases and decreases, and so one can resort only to the universal-particulars, such as cow-ness, or when one wants to explain how one and the same cause can produce two opposite effects at the same time, at the same time increasing and decreasing something. But this last problem can not be solved definitely without resorting to the 'own nature' of the thing itself. 150 Arunadatta, on the contrary, is not concerned with the relationship between the similar and the universal; he explains the text in a very plain way, and then gives a great number of examples. According to him, there are three ways to increase or decrease something by means of the universals and the particulars, and these three ways correspond to the three categories of substances, actions, and qualities. An instance of the first way is represented by the blood which increases the blood because both are made of the same substance, water. He exemplifies the second way by means of the drug called coca, 151 which, even though it is earthy, increases the kapha because it has the same qualities as this (unctuousness, heaviness, etc.). Finally, actions increase the vāta because both have in common the universal of motion-hood. This explanation makes use of the universal-particulars of Caraka in its first part, and of the svayonivardhana of Suśruta in its second part.

Although in the interpretations of the commentators of the Vāgbhaṭa-texts there is the general tendency to use less and less of a technical philosophical terminology, some traces of the original conceptual framework still remain, so that even here it is necessary to know Indian philosophy in order to understand some of the basic concepts of Āyurveda.

¹⁴⁷ Actually this already happens in the SS, but is more noticeable in the AH and in the AS which follow closely the order of the exposition of Caraka (cf. AH *Sūtra* I,15a;16b-17;18;19; AS *Sūtra* I,31;33b;35;36b-37a;40; etc.).

¹⁴⁸ For *vīrya*, cf. AH *Sūtra* I,17a; AS *Sūtra* I,35b; CS *Sūtra* XXVI,62-65; SS *Sūtra* XL,5; for *vipāka*, cf. AH *Sūtra* I,17b; AS *Sūtra* I,36a; CS *Sūtra* XXVI,57b-58; SS *Sūtra* XL,10-12.

¹⁴⁹ Cf. Indu ad AS Sūtra I,32b: sādṛśyasāmānyayoś cātra na kaścid viśeṣah. ekena rūpeṇa vinā sādṛśyam api na sambhavati.

¹⁵⁰ Cf. ibid.: na hi svabhāvaḥ paryanuyoktavyaḥ.

¹⁵¹ Cinnamomum Zeylanicum Nees or one of the other drugs listed in G.J. Meulenbeld, The Mādhavanidāna and its Chief Commentary. Chapters 1-10. Introduction, Translation and Notes, Leiden 1974, pp.554 and 561; T.B. Singh and K.C. Chunekar, op. cit., p.161.

¹⁵² Cf. Arunadatta ad AH Sūtra I,14a.

In this paper we have tried to examine the way in which Āyurveda has made use of the universal-particulars of Vaiśeṣika; but this is only one of the many debts which Āyurveda has contracted from Indian philosophical doctrines.

ABBREVIATIONS

АН	Aṣṭaṅgaḥṛdaya with the commentaries Sarvāṅgasundarā of Aruṇadatta and Āyurvedarasāyaṇa of Hemādri ed. by H. Parādkar, Varanasi 1982 (Krishnadas Āyurveda Series 4).
AS	Aşţangasangrahan induvyākhyāsahitan, ed. by A.D. Athavale, Poona 1980.
Cakra	Cakrapāṇidatta in his Āyurvedadīpikā, see CS.
Cikits ā	Cikitsāsthāna.
CS	The Carakasaṃhitā of Agniveśa, revised by Caraka and Dṛḍhabala, with the Āyurvedadīpikā commentary of Cakrapāṇidatta, ed. by Jādavji Trikamji Ācārya, Bombay 1981, 4th ed. (1st ed. 1941).
NK	Nyāyakandalī, see PPB.
PPB	Praśastapādabhāṣya (Padārthadharmasaṅgraha) with commentary Nyāyakandalī by Śrīdhara Bhaṭṭa, along with Hindī translation ed. by D. Jhā, Varanasi 1977 (Gaṅgānāthajhā-granthamālā 1).
Śārīra	Śārīrasthāna.
SS	Suśrutasaṃhitā of Suśruta, with the Nibandhasangraha Commentary of Śrī Dalhaṇācārya and the Nyāyacandrikāpañjikā of Śrī Gayadāsācārya on Nidānasthāna, ed. by Jādavji Trikamji Ācārya and by Nārāyaṇ Rām Ācārya 'Kāvyatīrtha', Varanasi/Delhi 1980, 4th ed. (Jaikrishnadas Āyurveda Series 34).
Sūtra	Sūtrasthāna.
Vy.	Vyomavatī, in: Praśastapādabhāṣyam of Praśasta Devācārya with Vyomavatī of Vyomaśivācārya, ed. by Gopīnāth Kavirāj and Dhuṇḍhirāj Śāstri, Varanasi 1983, 2nd ed. (Chowkhamba Sanskrit Series 61).
VS (Candra)	Vaiśeşikasūtra of Kaṇāda, with the commentary of Candrānanda, critically ed. by Muni Śrī Jambūvijayajī, Baroda 1982 (Gaekwad's Oriental Series 136).
VS (Śaṅkara)	Vaišeşikadarsane maharşipravaraprasastadevācāryaviracitam prasastapādabhāsyam sankaramisravinirmitah upaskāras ca, ed. by D. Šāstri, Kāsī 1923 (Kāsī

Sanskrit Series 3).

Yukti, le quatrième pramāņa des médecins (Carakasamhitā, Sūtrasthāna XI, 25)

PIERRE-SYLVAIN FILLIOZAT

La Carakasamhitā contient des remarques méthodologiques et épistémologiques précieuses pour l'histoire du travail intellectuel dans l'Inde ancienne. Car ce sont des notations authentiques nous montrant la conscience que des créateurs de la science indienne avaient des techniques de leur métier en particulier et du fonctionnement de la raison en général. Ces remarques sont disséminées dans l'ensemble de l'ouvrage, trouvant leur place avec opportunité dans des contextes divers. La plus importante est sans doute celle qui fait l'objet d'un chapitre particulier, Vimānasthāna IV, appelé Trividharogaviśeṣavijnānāya.¹ Elle consiste en une analyse des moyens de connaître les caractères spécifiques des maladies (rogaviśeṣavijnāna). Ils sont au nombre de trois: āptopadeśa ou enseignement par des personnes qualifiées, pratyakṣa ou observation directe par les organes des sens, anumāna ou inférence. La tradition lettrée de l'āyurveda a retenu cette analyse et a limité à ce nombre de trois les moyens d'atteindre une connaissance exacte ou pramāṇas.

Dans un autre contexte, celui des aspirations de l'homme, une nouvelle analyse des pramāṇas est présentée. Elle en introduit alors un quatrième, appelé yukti. Ce n'est plus le sujet unique du chapitre qui, intitulé Tisraiṣaṇīya, est principalement consacré aux trois aspirations (eṣaṇā) humaines. L'histoire a quelque peu oublié cette analyse ou, quand elle s'en est occupée, cela a été pour la ramener au schéma fondamental des trois pramāṇas, en rattachant le quatrième à l'un des trois ou à quelque autre lieu de la logique. Le but de cet article est d'examiner de près la définition de ce quatrième pramāṇa (Sūtrasthāna XI,25) avec des exemples (23-24;32) et de passer en revue les diverses interprétations de ce texte.

Il faut d'abord rappeler le contexte dans lequel il s'insère. Ātreya engage l'exposé sur trois aspirations de l'homme, vers la vie, les biens matériels et l'au-delà. Comme le fait entendre le commentateur Cakrapāṇi, l'homme se distingue de la bête par ces trois aspirations². C'est donc une donnée fondamentale de la nature humaine que de poursuivre ces trois buts. L'homme dont les facultés naturelles, physiques, intellectuelles et morales n'ont pas été atteintes, cherche les moyens de satisfaire à ces trois aspirations (eṣaṇā). Ce sont d'abord la prāṇa-eṣaṇā, le terme prāṇa 'souffle' référant à la vie en général, et la dhana-eṣaṇā où dhana 'richesse' connote tout bien matériel, toute activité estimables (avigarhita) et servant à la subsistance (vṛtti) ainsi qu'au progrès (puṣṭi). La troisième, paraloka-eṣaṇā, pose un problème particulier, parce que son existence même

¹ Toutes nos références à: The Charakasaṃhitā by Agniveśa revised by Charaka and Dṛidhabala, With the Āyurveda-Dīpikā Commentary of Cakrapāṇidatta, ed. by Vaidya Jādavji Trikamji Āchārya, Bombay (Nirṇaya Sāgar Press) 3rd edition 1941.

 $^{^2}$... kurvan ya eva puruşa eşanātrayam anvişyati sa eva puruşo bhanyate nānyah paśutulyatvād ... (p.67, col. b).

peut être mise en question. Paraloka peut se traduire par 'autre monde', mais connote aussi d'autres notions que celle d'un monde, svarga ou autre, où l'homme va après la mort. Loka a une acception ancienne et classique plus large. Il réfère à toute récompense que l'homme peut recevoir après la mort³ ou même de façon encore plus générale à toute rétribution de ses actes. De fait Caraka dans le présent contexte prend ce terme comme référant précisément à la renaissance (punarbhava). Ceux qui mettent en cause l'existence de quelque chose après la mort sont appelés nāstika. Caraka les présente en précisant la raison sur laquelle ils se fondent: santi hy eke pratyakṣaparāḥ parokṣatvāt punarbhavasya nāstikyam āśritāḥ: 'il en est quelques-uns qui se vouent à la seule observation par les sens et adoptent la thèse de l'inexistence de la renaissance, parce que cela est au-delà des sens'.

À cela Caraka oppose l'attitude de celui qui est buddhimant c'est-à-dire possesseur de la faculté de connaître et use de cette faculté pour acquérir des connaissances échappant aux sens. L'homme a la faculté de voir plus loin que ce à quoi ses sens lui donnent accès:

tatra buddhimān nāstikyabuddhim jahyād vicikitsām ca. kasmāt. pratyakṣam hy alpam; analpam apratyakṣam asti, yad āgamānumānayuktibhir upalabhyate. yair eva tāvad indriyaiḥ pratyakṣam upalabhyate, tāny eva santi cāpratyakṣāṇi: 'À ce propos l'homme doué de la faculté de connaître doit laisser la thèse de l'inexistence [de ce qui est au-delà des sens] et le doute. Comment cela? Ce qui est accessible aux sens est peu de chose, ce qui leur est inaccessible et qui est saisissable par la tradition, l'inférence et la yukti, n'est pas peu de chose. Les sens par qui le perceptible est saisi, sont des objets inaccessibles à eux-mêmes.'

Une remarque s'impose. Il y a ici un refus du doute à l'égard de l'au-delà et une confiance remarquable accordée aux pouvoirs de l'homme de le connaître avec certitude. Mais ces pouvoirs sont bien délimités dans le cadre du rationnel. Et il y a une démonstration de la réalité de ce pouvoir par l'argument tiré de la non-perceptibilité des sens par eux-mêmes. L'évidence de la réalité des objets non perceptibles que sont les sens fonde la confiance dans le pouvoir de la raison d'accéder à autre chose qu'au domaine du perceptible, établit cette accession comme une attitude rationnelle.

Cette affirmation de l'existence de pouvoirs de la raison est suivie de la définition des quatre moyens énumérés avec des exemples et une application au contexte, à savoir la démonstration de la théorie de la transmigration. À la fin de ce développement, en référence aux quatre moyens énumérés, définis et illustrés, Caraka emploie le terme consacré de pramāṇa (evaṃ pramāṇais caturbhir upadiṣṭe punarbhave, p.73,col.b).

La définition de la yukti est la suivante:

buddhiḥ paśyati yā bhāvān bahukāraṇayogajān yuktis trikālā sā jñeyā trivargaḥ sādhyate yayā (25):

'La pensée qui voit des choses nées d'un concours de causes multiples, [dont l'objet est] des trois temps, par quoi la classe des trois [aspirations] est réalisée, doit être connue comme étant la yukti.'

³ Voir P.-S. Filliozat, 'The after-death destiny of the hero according to Mahābhārata', dans *Memorial Stones, a study of their origin, significance and variety*, Dharwar (Institute of Indian Art History, Karnatak University) and Heidelberg (South Asia Institute, University of Heidelberg) 1982, p.3-8.

Avant même la définition le texte a donné plusieurs exemples: jalakarṣaṇabījartusaṃyogāt sasyasaṃbhavaḥ yuktiḥ ṣaḍdhātusaṃyogād garbhāṇāṃ saṃbhavas tathā (23)

mathyamanthanamanthānasamyogād agnisambhavah yuktiyuktā catuṣpādasampad vyādhinibarhanī (24):

'La naissance d'une récolte de céréales à partir du concours de l'eau, du labour, de graines et de la saison est une *yukti*, ainsi que la naissance d'un embryon à partir du concours de six éléments⁴, ainsi que la naissance du feu à partir du concours du combustible à baratter, du batteur et de la rotation de ce dernier; possédant une relation de concours mutuel, les quatre piliers⁵ de la médecine, sous leur forme accomplie, éliminent la maladie.'

La lecture littérale de ce texte montre une mise en évidence de l'idée d'union, de concours de causes multiples de nature diverse, matière, agent, circonstance, action, menant à la réalisation d'un effet. L'ablatif samyogāt dans les trois premiers exemples présente le concours comme la cause directe de la réalisation de l'effet. L'idée de concours est encore renforcée dans l'énoncé du quatrième exemple par l'expression plus forte yuktiyuktā: c'est s'il y a concours des quatre acteurs du traitement médical que l'effet cherché, la guérison, se réalise. Enfin étymologiquement yukti est un dérivé primaire de la racine Jyuj 'être uni'. Le suffixe -ti sert à former des noms à sens ambivalent, action et objet d'action, comme krti 'acte' et 'œuvre'. Dans yuktiyuktā, yukti réfère à l'idée du concours des causes comme samyoga dans les exemples précédents. Dans yuktih, c'est-à-dire quand il y a référence au quatrième pramāna, d'après les exemples donnés yukti désigne l'effet résultant d'un concours de causes, donc le résultat de l'action d'union de l'effet à ses causes. Le pramana apparaît être ici l'opération de l'esprit qui ajuste un effet à un ensemble de causes et non pas à une seule. Il diffèrerait de l'inférence qui serait la simple reconnaissance d'une chose à partir d'un signe, par exemple un effet à partir d'une seule cause, ou la prévision d'un fruit à partir d'une graine.

La définition reprend bien l'idée de l'union des causes multiples produisant un effet (bahukāraṇayogaja). Elle précise aussi que la yukti est une 'pensée qui voit' cet effet naître du concours des causes. C'est donc bien l'opération de l'esprit qui envisage une multiplicité de facteurs et déduit de leur concours la naissance d'un effet. Le terme 'pensée' (buddhi) réfère au travail de l'esprit en dehors de l'activité des sens. Le résultat obtenu, l'effet issu de l'union des causes, est signifié par le terme bhāva, lequel, souvent expliqué comme dérivé du causatif bhāvayati 'faire être', désigne une chose en tant que produite, en particulier un produit de l'esprit, une idée, une nouvelle connaissance acquise à l'issue d'une opération de pensée.

Le terme *trikālā* qualifie *buddhiḥ* grammaticalement, mais qualifie en fait l'objet de cette opération de l'esprit. On comprend que ce qui est déterminé ainsi appartient aux trois temps, que cela est donc une vérité générale. Les exemples donnés sont eux aussi des thèses générales, la production des céréales à partir de conditions données, etc.

⁴ Voir Śārīrasthāna IV,6: 'l'embryon est une transformation [des cinq éléments,] vide, vent, feu, eau, terre et est le support de la conscience'.

⁵ Littéralement les quatre pieds. Ce sont le médecin, le malade, le traitement et l'infirmier. Voir Suśrutasaṃhitā, Sūtrasthāna XXXIV.

Enfin la définition apporte une dernière idée. La yukti sert à réaliser le trivarga. Ceci est la dénomination classique des trois buts de l'homme (puruṣārtha): kāma, artha, dharma. Ces termes peuvent être mis en correspondance avec les trois eṣaṇā du présent chapitre, prāṇa, dhana, paraloka⁶. Le présent contexte illustre cette idée. La yukti est un quatrième pramāṇa qui apparaît comme nécessaire pour prouver l'existence de la théorie de la transmigration, les trois autres pramāṇas ne suffisant pas. Elle est donc utile à la réalisation de la troisième eṣaṇā, le paraloka. Car sans la connaissance de l'audelà et sans la possession de moyens de le connaître l'aspiration ne pourrait être satisfaite. D'autre part la recherche de connaissances relatives à un au-delà ne se justifie qu'en réponse à cette aspiration qui est une donnée élémentaire de la nature humaine. Elle ne serait pas bien fondée si elle était totalement gratuite.

Il est nécessaire d'examiner comment la yukti se distingue de l'inférence. Celle-ci est définie et illustrée par Caraka de la façon suivante dans le même chapitre et contexte:

pratyakşapūrvam trividham trikālam cānumīyate vahnir nigūḍho dhūmena maithunam garbhadarśanāt (21)

evam vyavasyanty atītam bījāt phalam anāgatam

dṛṣṭvā bījāt phalam jātam ihaiva sadṛśam budhāḥ (22).

La définition est la proposition pratyakṣapūrvaṃ trividhaṃ trikālaṃ ca où anumānam est sous-entendu: 'l'inférence est précédée d'une observation par les sens, est de trois sortes et [son objet] est des trois temps'⁷. Un premier exemple, l'inférence d'un objet présent, reposant sur une observation générale, est donné dans la proposition: anumīyate | vahnir nigūḍho dhūmena: 'un feu caché est inféré d'une fumée'. Un deuxième exemple est celui de l'inférence d'une cause passée à partir de son effet, un troisième exemple est celui de l'inférence d'un effet futur à partir de sa cause; et ils sont tous les deux groupés dans la phrase allant de maithunaṃ ... à ... budhāḥ: 'les bons esprits, après avoir vu un fruit né d'une graine, de la vue de la grossesse concluent à une union sexuelle passée, de la vue d'une graine à un fruit futur conforme à elle'⁸.

Ces exemples d'inférence et de yukti présentent les différences suivantes. Ceux d'inférence mettent en rapport un terme ponctuel avec un autre aussi ponctuel, alors que ceux de yukti mettent en relation de cause à effet un terme avec un ensemble de causes, le concours des causes étant le facteur déterminant de la relation de cause à effet et établit cela à titre général. Le caractère ponctuel du terme inféré fait qu'il appartient à un seul des trois temps, alors que dans la yukti la thèse générale établie appartient aux trois temps. Les exemples d'inférence sont en fait la reconnaissance d'un terme à l'aide d'un signe. Les exemples de yukti sont des théories générales ayant la forme d'un rapport de causalité. Les définitions révèlent une autre différence importante. L'inférence repose sur une observation initiale par les sens. Mais un tel préalable n'est pas mentionné dans la définition de la yukti. Nous avons vu qu'au contraire tous les termes de cette définition concourent à la faire comprendre comme une pure opération

⁶ Voir A. Roşu, 'Études āyurvédiques. I. Le trivarga dans l'Āyurveda', dans *Indologica Taurinensia* (Torino) VI.1978, p.255-260.

⁷ Cette définition ressemble au Nyāyasūtra I.1,5: atha tatpūrvakaṃ trividham anumānaṃ pūrvavac cheṣavat sāmānyato dṛṣṭaṃ ca, par la référence au pratyakṣa comme préalable, et par la classification en trois variétés, mais en diffère en ce qu'elle ne nomme pas les trois variétés et ajoute la qualification trikālam.

⁸ Atītam se contruit avec maithunam, ihaiva sadṛśam avec bījāt phalam anāgatam.

de la raison. Dans la yukti c'est l'esprit qui établit le rapport de cause à effet entre le concours des causes et un objet. Dans l'inférence ce sont les sens qui établissent une fois la relation entre deux termes, le feu et la fumée par exemple; l'exemple observé directement sert de base à l'opération ultérieure de l'esprit qui permet de passer d'un terme à l'autre, s'il est caché aux sens.

Une fois définitions et exemples donnés pour les quatre *pramāṇa*s, Caraka revient au contexte et fait une démonstration de l'existence de la transmigration. Il recourt aux quatre moyens de connaissance. La *yukti* établit la théorie de la façon suivante:

yuktiś caiṣā — ṣaḍdhātusamudayād garbhajanma, kartrkaraṇasaṃyogāt kriyā; krtasya karmaṇaḥ phalaṃ nākrtasya, nāṅkurotpattir abījāt; karmasadṛśaṃ phalam, nānyasmād bījād anyasyotpattiḥ; iti yuktiḥ (32):

'Et la yukti est la suivante: de l'agrégat de six éléments naît un embryon, du concours de l'agent et de l'instrument naît l'action; il y a un fruit pour l'action accomplie, non pour celle qui n'a pas été accomplie, il n'y a pas naissance du germe sans graine; le fruit est semblable à l'acte, d'une graine ne naît pas autre chose; telle est la yukti.'

On reconnaît dans la première proposition le premier exemple de yukti donné cidessus. La deuxième proposition répond exactement à la définition et est aussi une yukti par elle-même. Mais on peut aussi les considérer ensemble et l'on voit qu'elles tendent toutes deux à conduire à la même thèse. La première attache le phénomène de la naissance à la présence de la conscience permanente dans la matière périssable, la seconde attache l'action à l'existence d'un agent. Les deux réunies mènent à l'idée d'âme sujet de la naissance et de l'acte. Les deux propositions suivantes se regroupent pour mener à l'idée qu'un acte est le fruit d'un acte antérieur, ne sort pas de rien. Les deux dernières concourent à montrer la conformité du fruit de l'acte à l'acte antérieur qui en est la cause. Chacun de ces couples de propositions peut donc être pris pour une yukti. On peut considérer aussi que l'ensemble des conclusions de ces trois yukti-s forme lui-même une yukti, en ce que le concours de ces trois conclusions mène à la théorie de la renaissance de l'âme en rétribution des actes antérieurs, conditionnée par leur caractère.

Les termes d'où part ici le raisonnement sont des idées déjà formées et admises. Chacune peut être prise comme raison de la thèse. De plus l'esprit envisage leur concours et conclut de l'ensemble des raisons à la thèse de la renaissance. Il est clair que ce n'est pas le mécanisme de l'inférence partant d'une perception ou opération des sens. C'est un raisonnement complexe qui conduit à une nouvelle idée par la prise en considération du concours de multiples facteurs.

Voici donc ce que fait entendre une lecture de ce court passage du chapitre Tisraiṣaṇ̄ya pris isolément en lui-même. À notre connaissance il n'y a pas d'autre texte dont la lecture pourrait conduire aux même idées. Pas même dans la Carakasaṃhitā. Sans doute le terme yukti est-il souvent employé. Mais c'est avec d'autres sens ou valeurs. On ne le rencontre plus comme nom technique d'un quatrième pramāṇa distingué des autres par des traits bien définis. Yukti est un terme général pour tout raisonnement ou pour un argument rationnel, une raison en tant que justification. Il est alors glosé par upapatti. D'autre part Caraka l'emploie dans une classification des thérapeutiques: trividham auṣadham—daivavyapāśrayam, yuktivyapāśrayam, sattvāvajayaś ca », 'la thérapeutique est de trois sortes: ce qui est fondé sur le divin, ce qui est fondé sur la yukti et la victoire sur le psychisme'. Caraka explique la variété yuktivyapāśraya

comme ce qui est fondé sur āhārauşadhadravyāṇām yojanā c'est-à-dire 'l'aptitude des substances de nourriture ou médicaments [au traitement des troubles]⁹. Un autre emploi remarquable est celui de yukti comme nom technique d'une des qualités qui assurent l'efficacité du traitement (siddhyupāyāś cikitsāyāḥ) et dont la connaissance permet au médecin d'agir convenablement. La yukti est alors définie comme yojanā yā tu yujyate: c'est la relation de la thérapeutique avec le mal et 'celle qui convient', donc son aptitude à soigner¹⁰. Enfin un autre emploi du mot yukti est celui que l'on trouve dans l'autre définition de l'inférence donnée dans le chapitre Trividharogaviseșavijñānīya du Vimānasthāna: anumānam khalu tarko yuktyapekṣaḥ, 'l'inférence est un raisonnement fondé sur la yukti', mais le texte ne dit rien de plus, ne donne pas la moindre explication sur ce terme dont dépend l'opération. En prenant yukti dans son sens étymologique d'union, relation', on peut légitimement penser avec le commentateur Cakrapāņi qu'il s'agit d'une référence à la notion de concomitance générale entre le terme servant de signe et le terme à prouver, entre la fumée et le feu dans l'inférence du feu à partir de la fumée. Mais il paraît difficile de faire entrer le quatrième pramāņa défini ci-dessus dans le cadre de cet élément composant de l'inférence. Il n'est pas non plus la tantrayukti ou règle d'interprétation permettant la compréhension et l'utilisation pratique d'un traité technique. Ce passage relatif au quatrième pramāņa nous paraît donc être unique de son genre dans l'ensemble de la Samhitā.

Ce quatrième *pramāṇa* n'a pas non plus eu la fortune des trois autres. La *yukti* ne fait pas partie des listes de *pramāṇa* communément admises et discutées dans les diverses écoles d'épistémologie. À notre connaissance un seul penseur, Śāntarakṣita, s'est intéressé au texte de Caraka la concernant, pour critiquer l'idée de la compter comme quatrième *pramāṇa*. Ce passage n'a donc pas été oublié, même s'il n'a pas été accepté.

Le philosophe bouddhiste passe en revue tous les *pramāṇa*s définis dans les écoles qu'il connaît, en fait l'examen et la critique. Il les rejette tous sauf deux, l'observation directe et l'inférence. Sa critique généralement consiste à montrer qu'il n'y a pas de critère distinguant telle opération d'acquisition d'une connaissance de l'un ou l'autre des deux seuls *pramāṇa*s fondamentaux. Dans ce contexte il considère la *yukti* de Caraka pour conclure que ce n'est qu'une forme d'inférence. Il ne reproduit pas le texte de Caraka, mais donne une définition originale et attribue à Caraka, en le citant nommément, l'idée que c'est un *pramāṇa* distinct.

yasmin sati bhavaty eva na bhavaty asatīti ca tasmād ato bhavaty etad yuktir eṣābhidhīyate (2692) pramāṇāntaram evedam ity āha carako muniḥ nānumānam iyaṃ yasmād dṛṣṭānto 'tra na vidyate (2693):¹¹

⁹ Sūtrasthāna, XI,54. Voir A. Roşu, Les conceptions psychologiques dans les textes médicaux indiens, Paris (Institut de civilisation indienne) 1978, p.104.

¹⁰ Sūtrasthāna XXVI,31. Voir S. Dasgupta, A History of Indian Philosophy, Cambridge (University Press) 1932, vol.II, p.370.

¹¹ Tattvasaṃgraha of Śāntarakṣita with the Commentary of Kamalaśīla, ed. Embar Krishnamacharya, vol.I, Baroda (Oriental Institute) 1926 (Gaekwad's Oriental Series XXX). Cakrapāṇi cite ce texte avec de nombreuses variantes. Śāntarakṣita a traité de deux pramāṇa, yukti et anupalabdhi en même temps. Cakrapāṇi n'a voulu citer que ce qui était relatif à la yukti. En éliminant tout ce qui concernait l'autre pramāṇa il a été amené à réécrire ce qui concernait le premier, afin de préserver l'intégrité du mètre. Les

'Telle chose existe quand telle autre existe, n'existe pas si l'autre n'existe pas; donc elle est issue de cette autre. Ceci est appelé *yukti*. L'ermite Caraka dit que c'est bien un autre *pramāṇa*. Ce n'est pas une inférence, parce qu'il n'y a pas d'exemple pour cela.'

Kamalaśīla commente:

etadbhāvabhāvitvena yā tatkāryatāpratītir iyam yuktih. iyam ca savikalpakatvān na pratyakṣam. nāpy anumānam dṛṣṭāntābhāvāt. tathā hi dṛṣṭānto 'pi, ata eva tadbhāvabhāvitvāt tatkāryatāpratipattih, tatrāpi dṛṣṭānto 'nyo 'nveṣaṇīyaḥ, tatrāpy apara ity anavasthā syāt. tasmāt pramāṇāntaram yuktir ity āha carako vaidyaḥ:

'La yukti est la compréhension qu'une chose est l'effet d'une autre parce qu'elle existe quand cette autre existe. Elle n'est pas une perception, parce qu'elle comporte une vue de l'esprit¹². Elle n'est pas non plus une inférence, parce qu'elle ne comporte pas d'exemple. En effet même s'il y en a un exemple, on en déduira qu'il y a compréhension de la qualité d'effet par la qualité d'exister en même temps; mais il faudra chercher un nouvel exemple de cela, [en tirer la même conclusion, puis] encore un exemple à cela. Il y aura indétermination. C'est pourquoi le médecin Caraka dit que la yukti est un autre moyen de connaissance.'

La yukti présentée ici par Śāntarakṣita est un raisonnement comportant deux opérations, la constatation d'une concomitance constante entre deux termes et la conclusion de cela à une relation de cause à effet entre eux. D'autre part il donne l'absence d'exemple comme trait distinguant cette yukti de l'inférence. Kamalaśīla ajoute un trait la distinguant de la perception, le fait qu'elle comporte une vue de l'esprit.

Au premier abord on ne trouve rien d'absolument semblable dans la Carakasamhitā. Mais une recherche plus approfondie de la source de Śāntarakṣita ne nous conduit à rien d'autre qu'au passage étudié ci-dessus. Cakrapāṇi, d'ailleurs, nous invite à chercher au même endroit, en ce que dans son commentaire de ce passage particulier il a jugé utile de citer le texte de l'auteur du Tattvasamgraha et de son commentateur. Il n'en reste pas moins que la différence entre les deux définitions apparaît grande et que la référence expresse à Caraka chez Śāntarakṣita surprend toujours quelque peu. S. Dasgupta va jusqu'à dire: 'Śāntarakṣita misrepresents Caraka's view of yukti in a very strange manner ... This [i. e. what Śāntarakṣita says] is entirely different from what Caraka says, as is pointed out by Cakrapāṇi'. En effet, Cakrapāṇi déclare qu'il n'a pas à répondre à la critique de Śāntarakṣita et de Kamalaśīla, parce qu'il n'accepte pas la yukti telle qu'ils la représentent: etau ca pūrvapakṣasiddhāntau evaṃbhūtayuktyasvīkārād evāpratividheyau. En fait Cakrapāṇi a une interprétation particulière de la yukti de Caraka, interprétation que nous examinerons ci-dessous et qui n'est pas celle de Śāntarakṣita.

Cette dernière mérite cependant d'être examinée de près. L'assertion de S. Dasgupta qu'elle détourne le texte de Caraka de son sens, est quelque peu exagérée et doit être

variantes sont considérables, mais de pure forme. Elle ne changent pas l'intention du texte original. Nous reproduisons ici la forme donnée par Cakrapāṇi, à quelques détails formels près empruntés à l'édition de Baroda.

¹² Les bouddhistes tiennent la perception comme ne comportant pas de conceptualisation ou opération de l'esprit surajoutée à l'expérience (kalpanāpoḍha). Même pour Caraka elle est la connaissance claire qui se forme à partir du contact des sens, du manas et des objets, dans le moment du contact (tadātve) Sūtrasthāna XI,20.

nuancée. La différence entre les deux définitions est peut-être plus apparente que réelle. Ou du moins on peut établir qu'elles ne s'excluent pas, que la seconde peut être déduite logiquement de la première. Śāntarakṣita met en évidence deux points: l'établissement d'une relation de cause à effet; le fait que l'opération de l'esprit se situe au-delà de la perception et sans son concours. L'on a vu que ces deux idées sont bien présentes dans la définition et les exemples de Caraka. L'élément qui semble en évidence chez le médecin et qui manque chez le bouddhiste est le concours des causes. D'autre part Śāntarakṣita met en relief l'opération d'établissement de la concomitance des termes examinés, ce dont Caraka ne parle pas. Les deux définitions s'accordent sur la dernière opération, l'établissement de la relation de cause à effet. Elles ne sont pas en désaccord sur le préalable de cette opération. Chacune en cite un possible, existant logiquement. Mais elles ne présentent pas le même.

Il y a donc malgré tout une parenté entre les deux définitions. Pourquoi Śāntarakṣita a-t-il recouru à une formulation différente et introduit un élément non formulé chez Caraka? C'est sans doute parce qu'il a réfléchi sur le texte de Caraka et l'a repensé dans le vocabulaire et la culture épistémologique de son temps. Caraka appartient à l'antiquité. Au Moyen Age Śāntarakṣita ne pouvait pas faire abstraction de notions mises en évidence dans l'intervalle de temps si riche en réflexions qui le sépare de son prédécesseur. Il fait intervenir le préalable de la concomitance constante des deux termes pour établir la relation de causalité, parce que la réflexion sur ce préalable avait historiquement pris de plus en plus d'ampleur et qu'il paraissait qu'on ne pouvait pas ne pas la mentionner. Son actualisation ne trahit pas forcément la pensée de Caraka. Elle met au jour un élément important que la formulation de son prédécesseur n'exprimait pas, mais

ne pouvait pas ne pas impliquer.

Śāntarakṣita retient donc de la yukti la conclusion à une relation de causalité à partir d'une concomitance d'existence et d'inexistence de deux termes. Cette nouvelle présentation de la yukti la rapproche beaucoup de l'inférence classique. Il ne lui est pas difficile de démontrer qu'elle ne se distingue pas de l'inférence. Rappelons l'argument qu'il prête à Caraka pour prouver la différence des deux pramāṇa, celui de l'absence d'exemple ou dṛṣṭānta, chose, remarquons-le, dont Caraka ne parle pas, et c'est peut-être sur ce point que le bouddhiste outrepasse le plus la réflexion du médecin. Kamalaśīla explicite cet argument de la façon suivante. Supposons que l'on ait un exemple de concomitance de deux termes. On en conclut que l'un est cause de l'autre. Mais il faut aussi trouver un exemple de concomitance entre la dite concomitance et la dite relation de causalité. S'engager sur cette voie mène à une impasse, car s'il faut un nouvel exemple pour passer de la concomitance à la conclusion, il n'y aura pas de fin, tant que l'on visera à faire une conclusion.

La réponse à cet argument est qu'il n'y a pas différence entre la concomitance et la relation de causalité. Et s'il n'y a pas de différence entre les deux, il n'y a pas de yukti pour passer de l'une à l'autre.

kāryakāraṇabhāvasya pratipattir na saṃgatā tasmād asyāṃ na bhedo 'sti sādhyasādhanayor yataḥ:

'La dite compréhension d'une relation de cause à effet [à partir de la concomitance] n'est pas correcte, parce qu'il n'y a pas de différence entre la preuve et la chose à prouver.'

Kamalaśila commente:

yuktau na sādhyasādhanayor bhedaḥ; tathā hi — atra tadbhāvabhāvitā hetuḥ, kāryakāraṇatā ca sādhyā, na cānayor bheda upalabhyate paryāyatvāt tarupādapavat:

'Dans la yukti il n'y a pas de différence entre la chose à prouver et la preuve; en effet, le fait d'exister lors de l'existence de l'autre terme est la preuve, la relation de cause à effet est la chose à prouver, et l'on ne voit pas de différence entre ces deux choses, parce que ce sont des synonymes, comme les mots taru "arbre" et pādapa "buveur [de sève] par le pied".'

Autrement dit la concomitance est la nature même de la causalité. Elle ne peut donc en être la preuve. Elle est la causalité même.

Arguera-t-on que l'on parle d'un tel rapport de preuve à conclusion entre la concomitance et la causalité, que cet emploi de mots existe et qu'une yukti est nécessaire pour le fonder. Autrement dit l'on n'établit pas que la concomitance est la raison qui établit la causalité, mais qu'elle est la raison autorisant à parler de causalité. Śāntarakṣita répond qu'un tel usage de parole repose sur une convention¹³. Or le moment d'établissement de la convention est l'exemple qui fonde la détermination du rapport. L'on a donc bien ici un cas d'inférence. Il n'y a pas de yukti qui soit un pramāṇa différent.

tadbhāvavyavahāre tu yogyatāyāḥ prasādhane saṃketakālavijñāto vidyate 'rtho nidarśanam:

'Mais pour établir l'aptitude à être traité dans un tel rapport [de preuve à conclusion] l'objet perçu lors de la convention [d'établissement d'un tel usage] est un exemple'.

Kamalaśila commente:

atha matam — na kāryakāraṇatā sādhyate kim tarhi tadbhāvavyavahāra iti, tatrāha — tadbhāvavyavahāre ityādi; tasyā hetuphalatāyā bhāvas tadbhāvaḥ, tatra vyavahāro yaḥ sa tadbhāvavyavahāraḥ jñānābhidhānapravṛttilakṣaṇam anuṣṭhānaṃ, tasmin yogyatā mūḍhaṃ prati sādhyate; [prayogaś ca —] ye yadvyāpārānantaraniyatopalambhasvabhāvās te tatkāryavyavahārayogyāḥ, tad yathā —saṃketakālānubhūtāḥ kulālādivyāpārānantara[niyata]upalambhasvabhāvāḥghaṭādayaḥ, tathā ca tālvādivyāpārānantaraniyatopalambhasvabhāvāḥ śabdā iti svabhāvo hetuḥ:

'Si l'on pense que ce n'est pas la relation de cause à effet qui est la chose à prouver, mais que c'est le fait de traiter cette relation comme telle, à cela l'auteur répond: tadbhāvavyvahāre ...: vyavahāra signifie l'exécution d'un acte caractérisée par la mise en œuvre de l'expression verbale de la connaissance; tadbhāva signifie l'existence de cette relation de preuve à chose à prouver; l'aptitude [de la concomitance à ce qu'on en parle comme causalité] est établie pour le sot; [le raisonnement est le suivant:] les choses dont la forme propre a sa perception limitée à avoir lieu après une activité de facteurs donnés sont aptes à être traitées comme effets de ces facteurs, par exemple des pots ou autres objets qui, perçus lors de l'établissement de cette convention, sont tels que leur forme propre a sa perception limitée à avoir lieu après l'activité du potier, etc., ou bien aussi des mots qui sont tels que leur forme propre a sa perception limitée à avoir lieu après l'activité du palais, etc. Ainsi la nature [de la chose à prouver] est-elle le signe la prouvant'

¹³ Quant à l'utilité de cette convention Kamalassīla précisera qu'elle est enseignée à qui serait assez stupide pour ignorer l'évidence de l'équivalence des deux notions de concomitance et de causalité.

Il y a donc un exemple à l'origine du raisonnement qui conclut de la concomitance au fait de parler de causalité. Ceci est une inférence.

Cakrapāṇi, nous l'avons vu, considère que ce n'est pas là la yukti de Caraka. Il comprend le texte de Caraka d'une façon tout à fait différente. Dans la définition il prend $k\bar{a}$ raṇa de bahukāraṇayogajān comme signifiant upapatti 'raison' et la racine \sqrt{j} an du dérivé de fin de composé ja dans le sens de 'être connu, compris'. La yukti est la pensée qui voit, c'est-à-dire prend pour objet des choses comprises à partir de nombreuses raisons. Et, ajoute-t-il, cette pensée est une conjecture (\bar{u} ha).

evam anena bhavitavyam ity evamrūpa ūho 'tra yuktiśabdenābhidhīyate; sā ca paramārthato 'pramāṇabhūtāpi vastuparicchede pramāṇasahāyatvena vyāpriyamāṇatvāt, tathā tayaiva ūharūpayā prāyo lokānām vyavahārād iha pramāṇatvenoktā. ... trivargasādhakatvam ca trivargasādhanād eva, ūhenaiva hi prāyas trivargānuṣṭhāne pra

vṛttir bhavati; (pramāṇaparicchedena tu pracāro virala eva):

'Ainsi le mot yukti exprime ici une conjecture ayant la forme 'cela doit être'. Et, bien qu'elle ne soit pas en réalité un pramāṇa, parce qu'elle est utilisée comme auxiliaire des pramāṇa dans la délimitation d'une chose, elle est cependant mentionnée comme telle ici, parce que l'on fait presque toutes les choses de l'usage courant avec elle sous sa forme de conjecture. ... Et elle a la propriété de réaliser la classe des trois fins de l'homme, parce que c'est sa seule réalisation. En effet, c'est généralement par conjecture que l'on s'engage dans l'exécution d'actes visant les trois fins; (mais il est rare que l'on se conduise avec délimitation exacte des choses par les pramāṇa)¹⁴.

Commentant l'application de la yukti à la démonstration de la renaissance, Cakrapāṇi recourt au terme tarka qui est équivalent à ūha et explique qu'il s'agit là d'une con-

jecture faite à l'aide d'arguments (upapatti) multiples.

Deux points sont à noter ici. La yukti est refusée comme pramāṇa, moyen de connaissance exacte. Mais elle est reconnue pour son utilité pratique dans l'usage courant. Cakrapāṇi donne une raison à son attitude. C'est une raison de philologue. Il a noté que dans d'autres passages de la Saṃhitā trois pramāṇas sont mentionnés (Vimāna IV) la yukti étant omise; ou, si quatre pramāṇas sont énumérés, ce n'est pas la yukti qui est incluse, mais l'upamāna ou 'comparaison'. Il affirme qu'il en est ainsi dans le chapitre Rogabhiṣagjitīya (Vimāna VIII). La comparaison apparaît, en effet, dans ce chapitre dans la liste des procédés destinés à procurer la victoire dans une discussion. Mais, même dans cette liste, la yukti n'apparaît pas. Cakrapāṇi a conclu du caractère isolé de la mention de la yukti comme pramāṇa, alors que les trois autres sont mentionnés plusieurs fois dans les divers passages de la Saṃhitā à sujet épistémologique, qu'il ne fallait pas prendre le présent passage à la lettre. Et il lit à la place la notion de conjecture.

Il y a une autre explication à cette lecture. Cakrapāṇi est, encore plus que Śāntarakṣita, tributaire de la culture logique de son temps. Il possède une très grande érudition. En matière de logique sa principale référence est le Nyāyadarśana de Gautama et l'on peut parler d'une certaine obédience de sa part à cette école, en ce qui concerne les lieux de logique. Son actualisation des idées épistémologiques de Caraka est quasi systématique. Cela est particulièrement sensible ici. Ce que dans le Nyāyadarśana il

¹⁴ La proposition entre parenthèses est dite par l'éditeur ne pas figurer dans le manuscrit qu'il a utilisé.

trouve de plus proche de la yukti de Caraka est le tarka ou ūha. Dans son interprétation de la yukti comme ūha on retrouve des éléments de la définition du tarka chez Gautama: avijñātatattve 'rthe kāraņopapattitas tattvajñānārtham ūhas tarkaḥ (Nyāyasūtra I,1,40) 'relativement à un objet dont l'essence n'est pas connue le tarka est une conjecture pour connaître cette essence à partir de l'explication des causes'.

Cakrapāņi signale une autre interprétation du texte de Caraka, à laquelle il ne souscrit pas, pas plus qu'à celle de Śāntarakṣita, mais qu'il n'attribue à aucun nom d'auteur. Ce serait de comprendre la yukti comme une prévision de l'effet à partir de ses causes. La critique évidente est qu'elle sera alors une simple inférence. On ne pourra non plus dire qu'elle est trikālā 'ayant un objet des trois temps', parce que son objet ne sera que futur. 15

Historiens et philologues modernes n'ont pas manqué de s'intéresser à ce passage de la Carakasamhitā. S'accordant à souligner l'intérêt des remarques épistémologiques du médecin de l'antiquité indienne, ils diffèrent souvent dans leur compréhension de la notion de yukti et dans la traduction du mot. S. C. Vidyabhusana qui, rassemblant divers éléments de mythes, reconstituait une figure de fondateur de la philosophie et de la logique indienne dans Medhātithi Gautama et qui voyait dans la Carakasamhitā 'a crude form' de sa théorie du raisonnement, 'a developed form' nous en étant parvenue dans le Nyāyasūtra, a été un des premiers, vers 1920, à rendre justice au précieux contenu épistémologique de la Samhitā médicale. Il traduit yukti par 'continuous reasoning', reproduit la définition en disant que ce terme 'refers to the knowledge which beholds conditions resulting from the co-operation of many causes and abiding in three times'. Il cite ensuite l'exemple démontrant la renaissance 16. Sa note brève nous paraît être tout à fait fidèle au texte de Caraka proprement dit. S. Dasgupta a consacré à la yukti une note plus longue dans son analyse détaillée du contenu philosophique de la Carakasamhitā. 17 Il se révèle beaucoup plus tributaire du commentaire de Cakrapāņi: 'When our intelligence judges a fact by a complex weighing in mind of a number of reasons, causes or considerations, through which one practically attains all that is desirable in life, as virtue, wealth or fruition of desires, we have what may be called yukti. As Cakrapāni points out, this is not in reality of the nature of a separate pramāņa; but, since it helps pramāņas, it is counted as a pramāṇa. As an example of yukti, Caraka mentions the forecasting of a good or bad harvest from the condition of the ground, the estimated amount of rains, climatic conditions and the like. Cakrapāni rightly says that a case like this ... is properly called uha and is current among the people by this name.' Cela ne reproduit qu'approximativement la pensée de Cakrapāņi et confond les deux thèses signalées par

¹⁵ Le riche commentaire de Gangādhara reprend l'interprétation de Cakrapāṇi et développe encore la référence au nyāya. Voir Carakasamhitā with Āyurvedadīpikā of Cakrapāmidatta and Jalpakalpataru of Gangādhara, ed. by Kavirāja Śrī Narendranātha Senagupta and Kavirāja Śrī Balāīcandra Senagupta, 3 vols. Kalikātā 1849-1855.

¹⁶ Satis Chandra Vidyabhusana, A History of Indian Logic (Ancient, Mediæval and Modern Schools), reprint Delhi (Motilal Banarsidass) 1978, p.28.

¹⁷ S. *Op.cit.* (voir note 10), p.375-376.

le commentateur, la conjecture (ūha) et la prévision ('forecasting'), Cakrapāṇi ne prenant pas à son compte la deuxième. Dasgupta reproduit ensuite l'interprétation de Śāntarakṣita. Assez curieusement il formule en note une extension de l'idée de yukti comme prévision en l'idée de yukti comme logique de la probabilité: 'Caraka's idea of yukti is the logic of probability, i.e. when from a number of events, circumstances, or observations one comes to regard a particular judgment as probable, it is called yukti. ... So far as I know, this is the only example of the introduction of the logic of probability in Indian thought'. Dans cette description on peut retenir l'emploi du terme de 'jugement' en tant qu'opération de l'esprit unissant divers éléments, mais il est imprudent de parler d'une valeur de probabilité et improbable qu'elle appartienne réellement à la pensée de Caraka.

Jean Filliozat, médecin et indianiste, s'est intéressé à cette notion de yukti. C'est en praticien de la médecine, en même temps qu'en historien et philologue, qu'il lisait le traité de médecine antique. Il en parlait souvent dans son entourage et dans son enseignement. C'est Monsieur Arion Roşu qui a le mieux recueilli et développé son enseignement. Il Filliozat voyait la yukti de Caraka plus comme une description de la pratique du travail intellectuel d'un médecin, que comme une analyse épistémologique d'un procès logique. Les interprétations historiques de Śāntarakṣita et de Cakrapāṇi raccordent la yukti à des notions philosophiques abstraites forgées dans un contexte de spéculations épistémologiques et, en ce sens, s'éloignent de l'intention pemière de Caraka, même si elles sont logiquement valables. J. Filliozat voulait donc revenir à cette intention, à cette vue du médecin indien de l'antiquité qui réfléchissait sur la façon pratique dont il travailllait à acquérir de nouvelles connaissances, que ce soit sur le corps du malade qu'il soignait, ou sur la destinée de la personne humaine en général, en ce monde et dans l'autre.

D'autre part il examinait la littéralité du texte de la Saṃhitā et insistait sur la valeur du sens étymologique du mot yukti. Pour lui l'idée d'ajustement était imposée par la dérivation à partir de la racine Jyuj. Il proposait plusieurs traductions du terme, reposant sur cette idée: représentation, conception cohérente, exposé adéquat, théorie bien liée. Il retenait aussi l'idée de construction de l'esprit dans le sens de partie d'une enquête rationnelle visant la vérité; d'un certain aspect la yukti est une hypothèse descriptive, explicative. Il voyait là une des marques les plus sûres du caractère rationnel de l'enquête scientifique et philosophique en Inde.

À côté du terme d''ajustement rationnel' celui de 'théorie' semble approprié pour rendre le terme yukti. Il rend compte, non plus de l'étymologie, mais de la lettre de la définition de Caraka qui présente la yukti comme la vue par l'esprit d'un ajustement de choses dans une relation de causalité. Les exemples, le contexte la montrent aussi comme l'établissement d'une théorie, l'établissement d'une loi de causalité à partir de faits préalablement connus. Elle est une démarche rationnelle, en tant que pur travail de l'intellect pour aller plus avant dans la connaissance, pour ajouter au savoir un ensemble de connaissances général et nouveau. Le fait que Caraka l'ait comptée parmi les pramāṇa ou moyens de connaissance droite, montre sa confiance dans le pouvoir de la raison de progresser dans la compréhension de la réalité.

On remarque que Caraka fait intervenir ce quatrième pramāṇa dans le contexte de la démonstration de l'existence de l'autre monde, non dans celui de l'examen médical

¹⁸ Op.cit. (voir note 9), p.84.

proprement dit. Mais cela ne veut pas dire qu'il fait une différence entre les deux types d'enquête. Deux de ses exemples de *yukti* sont empruntés au domaine médical. La *yukti* prolonge l'inférence, la multiplie et à ce titre s'en distingue. Plus l'objet visé par l'enquête s'éloigne des possibilités d'observation directe ou d'inférence immédiate, plus l'outil d'investigation devient complexe. C'est alors qu'il devient *yukti*. Et celle-ci dans l'illustration donnée par Caraka quand il veut prouver la théorie des renaissances parachève la démonstration qu'il a commencé par le recours aux trois autres *pramāṇa*.

On doit souligner l'originalité de ce concept de yukti. Il nous paraît malaisé de trouver un caractère commun aux divers emplois du mot. Le pramāṇa ainsi appelé n'est pas le composant de l'inférence, ni la règle d'interprétation d'un traité (tantrayukti), ni la propriété d'aptitude en thérapeutique, etc. Un essai d'unifier ces notions diverses, sous le chapitre du sens étymologique du mot, risquerait d'enlever au pramāṇa sa spécificité.

On doit enfin souligner l'originalité de Caraka dans la spéculation épistémologique indienne. On a vu qu'il était malaisé de ramener cette *yukti* à des concepts de logique classique, *anumāna* et *tarka*, comme le faisaient Śāntarakṣita et Cakrapāṇi et que ce n'était pas lui rendre pleine justice. Caraka est une étape importante de l'histoire de la logique, n'est pas un épigone d'autres écoles, mais représente une contribution originale, profondément réfléchie et dont il convient de préserver l'intégrité.

Summary: In the context of a description of the three pursuits of man, i. e. life, wealth and the other-world, in order to prove the existence of the survival and rebirth of the soul after death and to establish the capacity of the human mind to investigate matters beyond the senses, Caraka analyses the process of investigation as consisting of direct observation, inference, authoritative verbal testimony and yukti. He calls these four processes pramāṇas. Three of them are well-known; the fourth, yukti, has been expounded as a separate means of knowledge only by Caraka and only in one passage of his Saṇhitā, namely in the Tisraiṣaṇīya chapter (Sūtrasthāna XI). His definition of yukti is: 'The thought which sees ideas born from the concourse of several causes, the object of which pertains to the three times, and by which the three pursuits are achieved, is known as yukti'. Examples are given and the application to the demonstration of rebirth is shown. Yukti is differentiated from inference by the fact that it establishes a theory from the concourse of a number of facts and does not start from direct observation, whereas inference is given as a mere conclusion of the existence of a punctual knowledge from an observed fact.

Śāntarakṣita appears to be the only thinker to have paid attention to Caraka's concept. He takes it as a process in which one observes the concomitance of presence and absence of two things and then deduces from it a relation of cause and effect between them. But he criticises this as being tautological: concomitance and causality are the same thing for him; and he thus rejects the idea of making yukti a separate means of knowledge.

Caraka's commentator, Cakrapāṇi, also does not accept yukti as a separate pramāṇa. He understands it as a mere case of reasoning, a conjecture of a fact from a number of arguments. He equates it with the tarka of the Nyāya school. He justifies Caraka by saying that this process may be emphasised as it is in common use. Then he refers to another interpretation of yukti as the forecasting of a future fact from present observations, and quotes

Śāntarakṣita's interpretation. He does not accept these two as being the real thoughts of Caraka.

Among modern interpreters, S. Dasgupta follows Cakrapāṇi's interpretation, which is influenced by classical Nyāya concepts. But Jean Filliozat tries to understand Caraka independently from later speculations. He emphasises the practical aspect of Caraka's approach, understanding Caraka's epistemology as a reflection, a self-analysis by a physician of his processes of thinking when he practised his art, or when he conducted investigations in order to acquire new contents of knowledge.

In the history of Indian epistemology the originality of Caraka's approach and ideas must be underlined. It shows not only the rational character of his practice, but also his spirit of quest and research.

Miscellanea de Operibus Āyurvedicis*

RAHUL PETER DAS

Linguistic and lexicographic studies of Old Indo-Aryan have only rarely utilised the rich data contained in medical texts, which, though mostly following the rules of 'classical' Sanskrit, also contain material which links them on the one hand to more archaic forms of Old Indo-Aryan, on the other to Middle Indo-Aryan. As such the language in these texts sometimes shows similarities with that of the epics and Purāṇas, with that of inscriptions, and with 'Hybrid' Sanskrit. I shall here present gleanings from my perusal of medical texts demonstrating this; collections of this sort, apart from being of general interest to lexicographers and linguists, will perhaps at some time also serve as a basis for determining the different layers in composite medical works (cf. in this respect also p.118 of Madhav M. Deshpande, 'Pāṇini and the Northwestern dialect: Some suggestions on Sūtra 3.3.10' in: Languages and Cultures. Studies in Honor of Edgar C. Polomé, ed. Mohammad Ali Jazayery and Werner Winter, Berlin etc. 1988, pp.111-122). For the present, I have confined myself to the so-called 'classical' texts: Carakasaṇhitā (= Ca), Suśnutasaṇhitā (= Su), Aṣṭāngasaṇgraha (= As) and Aṣṭāngaḥṛdaya (= Ah). The commentaries to these texts have been utilised too when this seemed appropriate.

I am aware of the fact that my gleanings present little more than snippets chanced upon and not the result of systematic search. Unlike Vedic literature, however, Indian medical literature has not yet been deemed worthy of large-scale systematic studies with regard to language; such being the state of affairs, what may seem mere dilettantism in a field such as that of Vedic studies assumes a different value. The notes given below should therefore be seen in this light; waiting for a full-blown study may well turn into a wait till the cows come home unless a beginning — even if it be modest — is made. In this context I must also touch upon the subject of the textual base for systematic studies. It is hard to believe, but unfortunately true, that, as regards Indian medical texts, critical editions truly deserving this name can be counted on the fingers of one hand — and even these may be too many. But if we opt for waiting until more such editions have been made before embarking on studies of the sort envisioned above, we may have to wait years, probably decades, before we can even think of taking such studies up. I have therefore decided to make do with what we have at present, choosing as the basis of reference those editions of individual texts which I consider to be the best of those available, though of course far from ideal: for Ca the edition of Jādavaji Trikamji Āchārya, Bombay 31941, for Su that of Jādavji Trikamji Āchārya and Nārāyan Rām Āchārya, Bombay 31938, for As that of Ţi. Rudrapāraśava, Trichur 1913-1926, and for Ah that of Annā Moreśwar Kunte, Krisna Rāmchandra Śāstrī Navre and Hariśāstrī Parādkar Vaidya, Bombay 61939. In cases of doubt I have also consulted other editions, but have not as a rule expressly remarked on this.

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1. *ti*

Su, Ut 56.4 contains a problematic ti: sūcībhir iva gātrāṇi tudan santiṣṭhate 'nilaḥ yasyājīrṇena sā vaidyair ucyate ti visūcikā.

If we leave aside the *ti*, we may translate this anacoluthic construction (for a similar construction see Ut 25.6 in 21 below) as follows: 'Stinging whose body-members, as if with needles, the wind abides, together with digestive disorder, the [affliction of that person] is by physicians called *visūcikā-*.' The commentator Palhaṇa says on this: *ucyate ti varṇāgama ityādinā ikāralopāt sādhuḥ 'ucyate ti* is correct because of the elision (*lopa-*) of *i* by [the rule] "*varṇāgamaḥ*" etc.' As regards the citation explaining the elision, Palhaṇa is here most probably referring to a verse (cited below in its commonest form), dealing with 'etymological' explanation and mentioning elision, from an unknown source, cited e.g. in the *Kāśikā* on Pāṇ 6.3.109 and in the *Cāndravyākaraṇa* 5.2.127 (also in the *Śabdakalpadruma* under *nipātanaṃ* and the *Vācaspatya* under *nipāta*):

varṇāgamo varṇaviparyayaś ca dvau cāparau varṇavikāranāśau dhātos tadarthātiśayena yogas tad ucyate pañcavidhaṃ niruktam.

Actually, from this verse it only follows that there are cases in which elision (here: $n\bar{a}sa$ -) has to be considered in explaining a word. But according to what seems to be Palhaṇa's reasoning, that elision has to be considered at all justifies not only his considering, but also his postulating it in this particular case (which is complicated by the fact that iti is a $nip\bar{a}ta$, it being unclear whether the verse he quotes applies to them too). In other words, according to Palhaṇa ti here stands for iti. A variant of the Su verse incidentally has tu for ti, obviously creating a lectio facilior ('is by physicians however called $vis\bar{u}cik\bar{a}$ -'). (Palhaṇa also mentions a variant bhindan 'piercing/cutting' for tudan.)

On the position of iti before the quotation cf. Speijer, § 495; the position of ti is thus no argument against its standing for iti (the translation with ti translated thus would be: 'the [affliction of that person] is by physicians called thus: visūcikā-'). One might however also consider a sandhi form of ati, i.e. ucyate 'ti(-)visūcikā. This is however very problematic. No disease-name ativisūcikā- or ativişūcikā- is attested (whereas visūcikā- or vişūcikā- is very common), so that ati probably would not be compounded with the following word. It could however be an adverb, as an uncompounded adverbial ati '(too) much, excessively, exceedingly' is not uncommon in medical texts; a very cursory search turned up e.g. Ca, Sū 17.17, Ci 3.279 and Si 3.23 and 7.32, Su, Ci 36.37, Ut 3.25, 18.80, 42.143, 47.67, 49.3 and 60.16, As, Sū 3 (p.19a), 18 (p.134a) and 28 (p.219b), Ci 11 (p.198b) and Ut 46 (p.379b), and Ah, Sū 2.14, 12.72(variant) and 19.43 and Ut 22.69, which are but a few of the many instances. But an adverbial ati is difficult to reconcile with the rest of the sentence of Su, Ut 56.4, for it can hardly be connected logically with ucyate ('it is by physicians exceedingly called ...'). ati could only be connected with either tudan or santisthate ... ajīrņena, saying that the pain or indigestion described is excessive, but, even allowing for the freer syntactical construction of a verse, the position of ati then so far removed from these parts of the sentence, its being embedded in another (the main, and not the relative) clause, and its having another verb (ucyate) in its immediate. vicinity do rather speak against this possibility. Moreover, the fact that visūcikā is dependent on *ucyate* and may (though it need not) as such be marked by a quotative particle would also speak for ti, which is in direct proximity to both visūcikā and ucyate, being such a particle.

2. Anaptyxis

Su, Ut 20.16, a verse in the metre Vamsasthavila, begins: pradiṣṭalingāny araśāṃsi tattvatas

araśas- is clearly an alternative form of arśas-, most probably metri causa; for other epenthetic (Middle and New Indo-Aryan) forms of arśas- see Turner, no. 690.

In Su, Ci 18.21c (part of an Upajāti verse) an anaptyctic vowel is inserted in the plantname barhiṣṭha-, here too probably metri causa: nirgunḍijātībarihiṣṭhayuktaṃ.

3. imāsu, imaiļ

In his commentary on Su, Ci 1.140, which latter begins with vranakriyāsv evam āsu ..., Dalhana explains the word āsu by: āsv imāsu vranakriyāsu, i.e. he explains the perfectly regular 'classical' Sanskrit form āsu by the word imāsu although imāsu is irregular in classical Sanskrit. This is highly interesting, for it shows not only that such an 'irregular' form was in vogue in the Sanskrit Dalhana used, but also that in this same language $\bar{a}su$, a form a modern student of Sanskrit should be able to identify without difficulty, was obviously not a common form, seeming indeed so uncommon that it actually required an explanation. Palhana also mentions a variant noted by Gayadasa (Gayin) to this verse which begins: vranakriyāsv imāsv eva imāsu is obviously an alternative form of the 'regular' āsu here too. Similarly, in Su, Ut 39.235 we find an 'irregular' form, namely imaili instead of ebhili: ... prasādhya kusumair imaili. imaili appears also in Ca, Ci 26.88: ... dravyair imair akṣasamaiḥ supiṣṭaiḥ. We find it likewise in Ca, Ci 21.127: ... bhindyād vā bheṣajair imaiḥ. To the latter passage corresponds in Ah, Ci 18.27: ... ebhir bhidyāc ca bhesajaih. The Siddhasāra of Ravigupta (ed. R.E. Emmerick, Wiesbaden 1980) too has imaih several times: 21.10+13 (kalkair imaih ślaksnapistaih ...), 26.51.3 (jalapistair imais tulyair ...) and 26.104 (... lepo vā saghṛtair imaiḥ). Cf. in this connection also Wackernagel-Debrunner III, § 248d and Renou, § 258.

4. Caraka's Compounds

Several compounds in *Ca* are problematic, and some have also caused the commentator Cakrapāṇidatta difficulties. Thus e.g. prabhāvarṇasvarottamakara- (which qualifies rasāyanavidhāna-) in Ci 1.2.3 is explained as: uttamāni prabhādīni karotīti prabhāvarṇasvarottamakaram. evañjātīyaś ca pūrvanipātāniyamo 'pratibandhena carake 'sti. sa mayūravyaṃsakādipāṭhād draṣṭavyaḥ 'It makes excellent/the best (uttama-) lustre (i.e. beautiful appearance) (prabhā-) etc.: thus prabhāvarṇasvarottamakaram. And this sort of non-limitation [by a rule] (aniyama-) of the placing first [of a word in a compound] (pūrvanipāta-) is undisputedly present in Caraka['s work]. It is to be regarded (= explained) according to the recitation [of the gaṇa-] "mayūravyaṃsakādi".' The latter refers to Pāṇ 2.1.72 (mayūravyaṃsakādayaś ca) and the accompanying gaṇa-; Pāṇ 2.1.72 has been used as a heading under which mostly tatpuruṣas, but also bahuvrīhi compounds that seem unexplainable by Pāṇini's rules have been lumped together (cf. Paul Thieme, Kleine Schriften, Wiesbaden 1971, pp.629f.).

Cakrapāṇidatta obviously analyses prabhāvarṇasvarottama- as a karmadhāraya compound, and it is true that in 'classical' Sanskrit one would rather expect uttamaprabhāvarṇasvara-, which with kara- would give uttamaprabhāvarṇasvarakara-.

However, the compound as given can also be explained as containing a genitival tatpuruṣa prabhāvarṇasvarottama- analogous to dvijottama-, narottama- and the like: 'making the best (uttama-) of lustre, colour and voice', or else uttamakara- could be taken to belong together: 'making best the lustre, colour and voice', though in this latter case we would rather expect the cvi-formation uttamīkara-. But whichever way we explain it, even if the compound might thus be explained in a way which makes it unnecessary to postulate an unusual order of its members, it is true that a compound such as prabhāvarṇasvarottamakara- does nevertheless strike one as unusual.

In the same way, girivișamamastaka- and jalogravega- in Sū 8.19 (na girivişamamastakeşv anucaret. ... na jalogravegam avagāhet, two independent sentences, separated by the sentence na drumam ārohet, in a long prose list of syntactically independent injunctions on how to behave properly), for instance, would probably be analysed by one used to 'classical' Sanskrit as irregular forms of viṣamamastakagiri- 'mountain whose tip is uneven (i.e. probably: hard to traverse, dangerous)' (not to be moved along: na ... anucaret) and ugravegajala- 'water whose current is fierce' (not to be plunged into: na ... avagāhet) respectively, or even as viṣamagirimastaka- 'uneven mountain-tip' and ugrajalavega- 'fierce water-current' respectively (Cakrapānidatta does not explain these two compounds). But here too one could translate the compounds given in a different manner: 'uneven tip of a mountain' and 'fierce current of water' respectively, i.e. by taking the last two members in each compound (viṣamamastaka- and ugravegarespectively) as belonging together. As regards girivişamamastaka-, one could perhaps also consider taking girivişama- to mean 'rugged [ground] between/of mountains', i.e. 'mountainous rugged ground' (cf. vişama- 'rough ground; bad road; precipice'); the whole compound would then mean 'tip (i.e. probably: high, protruding part) of mountainous rugged ground', or even 'rugged ground between/of and tips of mountains.' The whole is complicated by Vi 3.36, which tells us that, if our life-span were only pre-ordained (yadi hi niyatakālapramāṇam āyuḥ sarvaṃ syāt) (i.e. if we had no independent means of prolonging or shortening it), then it would be senseless to avoid certain detrimental or injurious actions (these are listed in the passage). Among those actions which it would be senseless to avoid (na ... parihāryāḥ syuḥ) we find prapātagirivişamadurgāmbuvegāh, which looks like a reference to Sū 8.19. However, the syntactical relationship between the various members of this compound is not clear either. Thus we cannot be sure whether we are to take durgāmbuvega- as one word ('difficult to traverse' + 'current of water'), which would speak for the analysis of jalogravega- as the equivalent of ugrajalavega-, or whether durga- and ambuvega- are different words, i.e. we have here '[place/passage] difficult to approach/traverse' and 'current of water'. And are prapāta 'cliff, precipice' and girivişama- (then probably 'mountainous rugged ground') separate members, or are we rather to see here prapātagiri- 'mountain which is a cliff/precipice. i.e. sheer mountain' and maybe vişamadurga- 'uneven [place/passage] difficult to approach/traverse'? On the other hand, one could also think of the combination girivişamadurga- '[place/passage] difficult to approach/traverse in/of mountainous rugged ground' or 'rugged [ground] and [place/passage] difficult to approach/traverse between/on mountain(s)', separated from *prapāta*-. Other analyses are probably also possible. Moreover, we have no means of knowing whether Sū 8.19 and Vi 3.36 presuppose exactly the same sort of construction or even the same list of objects. Note e.g. that a prapāta- is not mentioned in the former passage.

sukhāmbūṣṇa- in Ci 23.174 however, though it at first looks like a similar problematic case, probably does not fall into the same category. The word is part of the verse:

etad evocciținge 'pi pratilomam ca pāmśubhih udvartanam sukhāmbūṣṇais tathāvacchādanam ghanaih.

etad evocciținge 'pi poses no problem: 'This very [method of treatment is to be applied] also as regards [a wound from the bite of the arthropod called] uccitinga-'. As regards the rest, the first part of this (pratilomam ca pāmsubhih | udvartanam) prescribes rubbing the wound with dust/sand (plural) against the hair. According to the second part,

the wound is to be covered (avacchādana- 'covering') with something characterised as 'dense' (ghana-). Now in medical texts the term sukhoṣṇāmbu- 'pleasantly warm water' (or other compounds of sukhoṣṇa- with words for 'water') is very common ('hot' obviously does not fit here; in describing 'non-warm', the Sanskrit uṣṇa- is more akin to the French chaud than to the differentiated English warm and hot, though one can, if need be, differentiate too — cf. e.g. kaduṣṇa-/koṣṇa-'tepid'). In the light of Cakrapānidatta's remarks on 'unusual' compounds one might be tempted to take sukhāmbūṣṇaiḥ here in the sense of sukhoṣṇāmbubhiḥ (on the plural of expressions for water cf. Das, pp.56;509f.). 'Dense' would then probably be used in the sense of 'copious', i.e. we would have 'with copious pleasantly warm water' (sukhāmbuṣṇais ... ghanaih). But that would mean that the member with the wound would have to be submerged in water, and it is very doubtful whether this would be described as a 'covering [of the wound]' (avacchādana-). Moreover, since sukhāmbu- (and similar words) are often used hypocoristically in the sense of sukhoṣṇāmbu- or the like, it rather looks as if sukhāmbūṣṇa- is to be analysed as 'warm like pleasantly warm water', the word together with ghana- qualifying pāmśu-, i.e. the translation of the whole verse is: 'This very [method of treatment is to be applied] also as regards [a wound from the bite of the arthropod called] uccitinga-, and [also to be applied are] rubbing [of the wound] against the hair with dust/sand warm like pleasantly warm water, further covering with [this which is] dense (or: rubbing against the hair with dust/sand, further covering [with this] warm like pleasantly warm water [and] dense)'. Cakrapāṇidatta too takes ghana- to refer to pāṃśu- (ghanair iti pāṃsubhir $[=p\bar{a}m\acute{s}u^{\circ}]$ eva ghanaili), but unfortunately he makes no other remark on this verse. As regards Jejjata/Jajjata, he does not remark at all on the part of the verse that is problematic to us. On his commentary see Vol. 2 of the edition of Ca by Haridatta-

A similar case is found in Ci 7.15, namely lomapinjara-, which qualifies that variety of the skin-disease kustha- which is called audumbara-:

dāhakandūrujārāgaparītam lomapinjaram

śāstrin, Lavapura ²1941.

udumbaraphalābhāsam kuştham audumbaram viduh

'They consider a lomapiñjara- kuṣṭha- filled with (i.e. characterised by) burning, itching, pain and redness/inflammation [and] resembling the fruit of an udumbara- (most probably Ficus racemosa Wall.; see also Meulenbeld, pp.528f.) [to be] the audumbara-[variety].' In the description of this variety of kuştha- e.g. in Ah, Ni 14.15 and As, Ni 14 (p.71a) we find that it is characterised by skin and hairs copper-coloured like a ripe udumbara- [fruit] (pakvodumbaratāmratvagroman-). In the light of this, since pinjarameans 'tawny', lomapiñjara- at first glance appears to be an equivalent of piñjaraloman-'of/with respect to which the hairs are tawny'. But Cakrapāṇidatta says: lomapiñjaram iti romabhih piñjaram "lomapiñjara-": piñjara-, [i.e.] tawny as regards (literally: with/through) the hairs (or, more idiomatically: tawny of hair)', i.e. he analyses the compound as formed with the prior member in the function of an *instrumentalis partis* (on this instrumental cf. e.g. Speijer, § 73); we could even consider a locative *lomasu* ('with respect to'). In any case, this seems to be a compound of the sort described by Wackernagel-Debrunner II,1, § 95c, and as such maybe not very common, but not really problematic.

Sū 3.6 however is problematic. Here several substances are qualified as gopittapīta-(ṣaḍ ete gopittapītāḥ punar eva piṣṭāḥ). Now gopitta- refers to cattle-bile, from which the yellow pigment (go)rocanā- is gained. The question is, what does pīta- mean: does it mean 'drunk', or does it mean 'yellow'? Cakrapānidatta, discussing the former alternative, again refers to mayūravyamsaka- and thus Pān 2.1.72 (gopittapītā iti pītagopittāh. mayūravyamsakāditvena pūrvanipātāniyamāt [incorrectly printed pūrvanipātaniyamāt]). In other words, he analyses the compound as an alternative form of pītagopitta- '[that] by which gopitta- has been drunk', i.e. something soaked in gopitta-. Actually, since pīta- is a perfect participle, Cakrapāņidatta might rather have referred to Pāņ 2.2.37 (vāhitāgnyādişu), which describes the optionality of the participle being the first member of a bahuvrīhi in the case of compounds such as āhitāgni- etc. (i.e. we also have compounds such as agnyāhita-), as well as to Kātyāyana's Vārttikas to Pāņ 2.2.36 (niṣthā) as found in the Mahābhāṣya, which list other cases of the participle being the last member. Actually, -ta-adjectives are not necessarily perfect participles, and as such compounds with them as final members are not necessarily bahuvrīhis in origin, though they may be analysed as such; especially the use of $p\bar{t}a$ - as the final member of a compound in the meaning 'having drunk' (i.e. not as a past passive participle) is not rare in Sanskrit (cf. on this Wackernagel-Debrunner II,2, § 432b). Nevertheless, most compounds ending in -ta-adjectives seem in the course of time to have been regarded as 'inverted' bahuvrīhis with the past participle (see also Wackernagel-Debrunner II,1, § 116a). In the course of time this mode of composition became ever more wide-spread in Indo-Aryan, and it seems to have gradually become so common that in several New Indo-Aryan languages it is the regular mode of bahuvrīhi formation with the perfect participle, cf. e.g. Bengali kān-kāṭā 'whose ear is cut (off)', mā-marā 'whose mother is dead', pyāṇṭ-kholā 'whose trousers are opened/taken off' etc. Thus Cakrapānidatta might be right in his analysis of gopittapīta-.

However, he also considers the alternative meaning of $p\bar{\imath}ta$ -, telling us quite rightly that this would lead to an analysis of $gopittap\bar{\imath}ta$ - as 'yellow through gopitta-' (yadi $v\bar{a}$ gopitta-bhāvanayā $p\bar{\imath}tavarṇ\bar{a}$ $gopittap\bar{\imath}t\bar{a}h$ 'or perhaps $gopittap\bar{\imath}ta$ - is[:] yellow-coloured through the application of gopitta-'), which would basically refer to the same as the other analysis, i.e. in this case too the substances would be soaked in gopitta-. This analysis can however cope well with the order of the members of the compound. Thus here again the evidence for Cakrapāṇidatta's statement that we may expect compounds with an 'unusual' order of their members in Ca is not conclusive.

But bījakanṭhoddhṛta- in Ca, Ka 4.8 does seem to be a case illustrating the point Cakrapāṇidatta wants to make in his commentary on Ci 1.2.3. Here a fruit (phala-) (of the dhāmārgava-) is called bījakaṇṭhoddhṛta-. In explaining this, Cakrapāṇidatta refers expressly to Pāṇ 2.2.37: bījakaṇṭhoddhṛtaṃ phalam iti yatra bījāni baddhāni santi sa bījākaṇṭha uddhṛto yasmin tad bījakaṇṭhoddhṛtaṃ phalam. atra ca pūrvanipātāniyama āhitāg-nyādipūrvanipātavad bodhyaḥ "bījakaṇṭhoddhṛtaṃ phalam": with regard to (i.e. from, out of) which [fruit] the bījakaṇṭha-, [i.e.] that where the seeds are confined, has been removed, that is a bījakaṇṭhoddhṛta- fruit. And here the non-limitation [by a rule] of the

placing first [of a word in a compound] is to be understood [as taking place] like the placing first in āhitāgni- etc.' In other words, bījakanthoddhrta- is an alternative of uddhrtabījakantha- according to Cakrapānidatta. This does seem plausible. Cakrapānidatta also quotes a parallel passage by Jatūkarņa (on him see Meulenbeld, p.406) in which dhāmārgavaphala- is qualified by uddhrtabījamadhya- 'from which the interior with the seeds has been removed' or 'whose interior is uddhṛtabīja-' (uddhṛtabīja- itself is in the latter case then: '[that] from which seeds have been removed'), which shows that the action his explanation presupposes is correct. Even if bījakantha-, to my knowledge not as yet attested elsewhere, should actually not refer to 'where the seeds are confined' (i.e. the core) in a fruit, we would still have to consider an 'unusual' mode of composition here, for if kantha- should mean something like 'interior' (another meaning would hardly fit), we would probably have to translate as in the case of uddhṛtabījamadhya-. True, we might also consider the translation '(fruit) whose seeds have been removed from [its] interior', but then we would merely have a different case of 'unusual' priority of a member of the compound, as bījakanthoddhrta- would then stand for kanthoddhrtabīja-. But despite all this I must still play the part of the advocatus diaboli, for we might also consider taking the compound as given in the sense of 'set apart/separated from [its] bījakantha- (in the sense given by Cakrapānidatta)'. I admit to not feeling at ease with this translation, but it is not wholly impossible. Thus, even though the chances seem to be slight, there does remain a residual uncertainty which we cannot do away with.

This has to be borne in mind when analysing keśarotpala- in Ci 14.199 (lājāpeyā ... keśarotpalaiḥ siddhā). Is this a tatpuruṣa, in which case it would be the equivalent of utpalakeśara- 'lotus-filament'? Considering the fact that padmakesara- or 'keśara- is common, and that, though utpala- and padma- often do refer to different species of lotuses (cf. Wilhelm Rau, 'Lotusblumen' in Asiatica, Festschrift Friedrich Weller, ed. Johannes Schubert and Ulrich Schneider, Leipzig 1954, pp.505-513, also Das, p.141), they may also refer to lotuses in general, there is much that speaks for this explanation. On the other hand, kesara- or keśara- is also the name of several plants (cf. Das, p.126), so that keśarotpala- may be simply a dvandva compound: 'keśara- and utpala-'. Thus in this case again we are not, maddeningly, able to reach a definite conclusion.

I have however not made a systematic study of such problematic compounds in *Ca* and can thus offer no more information here on this problem, which does seem to require deeper investigation. I may however draw attention to a similar problem in *As*; in Sū 7 (p.44a) we find: *uddālakas tu vīryoṣṇaḥ* 'the [plant] *uddālaka*- however is *vīryoṣṇa-*' (on *uddālaka*- see Meulenbeld, p.529). The commentator Indu writes: *uddālakas tūṣṇavīryaḥ*, i.e. he takes *vīryoṣṇa-* to be the same as *uṣṇavīrya-* 'whose potency is hot' (= 'of hot potency'). But here too we may translate differently, namely by taking *vīryoṣṇa-* to mean 'hot through/in/with reference to [its] potency', (cf. *lomapiñjara-* above) which brings us back again to square one.

5. vājīvat

Ca, Ci 2.4.51 runs:

yena nārīşu sāmarthyam vājīval labhate narah vrajec cābhyadhikam yena vājīkaraņam eva tat

'Through which a man attains [sexual] capacity with respect to women like a stallion, and through which he may go [to have intercourse] exceedingly, that is an aphrodisiac indeed.'

vājīvat in b is problematic, as 'like a stallion (vājin-)' should be vājivat, there being no metrical reason for the ī. Now obviously the verse gives us an etymologising explanation of the term $v\bar{a}j\bar{\imath}karana$ - 'aphrodisiac'. This is however derived from $v\bar{a}ja$ - 'vigour' with the cvi-formation vājī/kṛ: 'invigorating'. Nevertheless, the vājī- in vājīkaraṇa- may have been analysed as a stem form, or else vājīvat may here be an ad hoc formation for etymological reasons. The problem is compounded by the variant vājīva 'like a stallion', i.e. vājī (the regular nominative of $v\bar{a}jin$) + iva, for $v\bar{a}j\bar{v}at$, which does away with the above difficulty. One could say that vājīval labhate is simply due to an erroneous doubling of the l of vājīva labhate, but since the former reading seems to be the one accepted by many editions (others having vājivat), we must be careful in making such an assertion as vājīva could be a secondary lectio facilior. One could also simply replace vājīvat by vājivat, but herein too we should be cautious, for, since we cannot simply assume that all the editors of the editions with vājīvat were ignorant of Sanskrit (even an editor merely copying the edition of another must have noticed this 'mistake' so easy to rectify), we cannot simply discard the possibility of the reading being based on a well-founded tradition. The whole seems ultimately to boil down to a text-critical problem, one which we, lacking critical editions of most medical texts, are hardly adequately equipped to tackle.

6. Transitive \(\ship bhram \)

Ca, Ci 9.7d states: bhramaty ayam ceta itas tatas ca. Because of the masculine nominative ayam, we must translate this as: 'and he lets his consciousness wander hither and thither', i.e. bhramati here is transitive, not intransitive as usual. Cakrapāṇidatta too sees no other means of explaining this line, and equates bhramati with the causative bhrāmayati, which is in effect the corresponding transitive to the intransitive: bhramaty ayam ceta ity aśvān rathir iva bhrāmayaty. atra ṇijartho 'ntarbhūtaḥ "bhramati ayam cetas", [i.e.] like a charioteer makes the steeds wander. Here the causatival meaning is included.'

7. siprāyante

siprāyante in Ca, In 10.19 is explained by Cakrapāṇidatta as follows: siprāyanta iti siprā nadī. tadvat svedātiprādurbhāvād ācarantīti siprāyante. "siprāyante": Siprā is [the name of] a river. [Thinking:] "due to an excessive appearance of sweat they behave like this [river]", [one says] siprāyante.' As a rule the verb siprāy- 'sweat (profusely)' is explained as a denominative formation from the etymologically obscure sipra- 'sweat; moon' (cf. on this Mayrhofer s.v. sipraḥ). However, sipra- is only lexically listed whereas the proper noun Siprā- (the name of a very holy river) is well known. If we were to follow Cakrapāṇidatta's explanation, then it could be concluded that sipra- 'sweat' is a back formation from the verb siprāy-. The problem with Cakrapāṇidatta's explanation of siprāyante is however that we do not know whether it is not just an ad hoc formulation, for why should, of the many rivers of the Indian subcontinent, this particular river (and be it ever so holy) have been singled out for denominative formation? On the other hand, it may be that Cakrapāṇidatta is here alluding to some tradition (maybe only local) that makes certain physical or mythological characteristics of this river let it appear

to be an ideal object for comparisons involving sweating, and it may well be that this tradition was not established usage — at any rate, I have not been able to find any other trace of it. But as it is, we seem to have no evidence to decide the matter one way or the other. However, Cakrapāṇidatta's explanation should make us bear in mind the possibility that, even if siprāy- should turn out not to be a denominative formation from Siprā-, it might still, considering the uncertain attestation of sipra-, turn out to be the origin of this noun, which need not necessarily be connected (at least as regards primary derivation) with Siprā-, whose etymology is not at all clear (see Mayrhofer, l.c.).

8. nāmya

Gerunds ending in -ya may not, according to the rules of classical Sanskrit, be formed from the uncompounded verbal root, but many non-classical exceptions are attested (cf. also Wackernagel-Debrunner II,2, § 640c). In Su, Ci 14.16 (maṇibandhaṃ sakṛn nāmya) we have a further example: $n\bar{a}mya$ in the sense of $n\bar{a}mayitv\bar{a}$ (as analysed by Dalhaṇa) may have been used metri causa.

9. śukraharanī

In Su, Ci 7.38 (a Śloka which incidentally has a penultimate light syllable in each pāda) we find śukraharaṇī srotasī 'semen-carrying channels (srotas-)', where śukraharaṇī (which ends pāda a) qualifies the neuter nominative srotasī (dual), thus obviously making it a dual too. Now whether we take the stem to be śukrahara- or śukraharaṇa-, we end up with an anomalous neuter dual in -nī or -ī respectively. True, our dictionaries list a feminine haraṇi- 'water-channel, gutter', which would give a regular dual haraṇī so that śukraharaṇī srotasī might then mean 'channels [which are] semen-channels'. But haraṇi- is attested only lexically, and moreover, to my knowledge srotas- in similar constructions is usually qualified by adjectives (cf. also śukravaha- in Ci 7.36), which means that we must be careful in postulating a haraṇi-, f. here.

It is difficult to account for the given dual form as a simple editorial or scribal mistake, as this reading is found in all the editions I consulted — without any variant being mentioned. There can be no metrical reason for the anomalous dual either, as a regular neuter dual form śukraharaṇe (from śukraharaṇa-; śukrahare from śukrahara-lacks one syllable) would not have made any metrical difference. Could the whole ultimately be due to a scribal or recitational error, maybe due to the fact that the word in question occurs between two words of which each ends in a long -ī (sevanī śukraharaṇī srotasī, as the text now runs), i.e. due to perseveration?

By contrast, the seemingly anomalous (of the same appearance as archaic Vedic forms) feminine duals $kusthapippal\bar{\imath}$ at the end of pāda d of the śloka Ca, Ci 26.153 and $anilav\bar{a}hin\bar{\imath}$ at the end of pāda b of the śloka Ah, Śā 4,15 seem actually to be regular duals of exceptionally used feminines ending in -i- instead of $-\bar{\imath}$ -, as kusthapippalyau or $anilav\bar{a}hinyau$ would have made the penultimate syllable heavy against the metre.

10. bhūmīkurabaka-?

Su, Ka 5.86a is printed as bhūmī kurabakaś caiva. This is part of a passage listing the different substances of which the gaṇa- called ekasara- (which I could not find mentioned

anywhere else) is made up. The printed text follows Palhana's analysis of 5.86a as containing the names of two substances, namely bhūmi- and kurabaka-: bhūmiḥ kṛṣṇamṛttikā (i.e. black soil, often used medicinally). kurabakah snigdhapattrah sitakusumah svanāmaprasiddhah (on kurabaka- see Das, pp.251-253). However, the form bhūmī is attested so far only in Vedic (cf. Wackernagel-Debrunner III, § 68aδαα), and, moreover, the gaṇahere described consists, according to Ka 5.84-86, only of plants - except for bhūmī-(= kṛṣṇamṛttikā- according to Dalhaṇa). This does make one wary of following Dalhaṇa. Since, further, there are a number of compounds — including plant names — in which bhūmi- with a lengthened final vowel (i.e. bhūmī°) is the first member (see any good dictionary), one does rather feel inclined to assume that here we have a single plant name: bhūmīkurabaka- (metrical reasons cannot account for the ī here). The larger Petersburg Dictionary (PW) also offers us this analysis. On the other hand, the Dhanvantarinighantu (s.v. avanī-) lists bhūmī- (as well as bhūmi-!) as a word for 'earth'. Though we do not know what this is based upon, it could be taken as an argument for the correctness of Dalhana's analysis. What should however also not be overlooked is that the word Dalhana explains ends in -i- and not in -ī-, so that there is also a possibility that his commentary does not explain the reading we are concerned with and is thus irrelevant in the context of this discussion.

11. Anomalous Removal of Hiatus

In Ca, Sū 27.54 ānūpāḥ and anūpasaṃśrayāt give ānūpānūpasaṃśrayāt by euphonic combination (ānūpa- qualifies certain animals, the properties of whose flesh is here described). Since the whole is part of a line of verse (bhūśayā bilavāsitvād ānūpā-nūpasaṃśrayāt) and the combination fits the metre, there can be no doubt as regards it. (On such anomalous combination in general cf. Wackernagel-Debrunner I, §§ 268f.) A variant of 27.54 reads ānūpo 'nūpasaṃśrayāt, but since all other animals mentioned in Sū 27.53cd-56ab appear in the plural form, there is every reason to assume that this variant, which smoothes over the difficulty of the anomalous sandhi by postulating a singular form, is secondary.

The commentator Cakrapānidatta remarks on this anomalous combination: ānūpānūpasamsrayād iti pūrvatrāsiddhavidher anityatvenānūpā ity atra yalopasya siddhatvenaiva saṃhitā jñeyā "ānūpānūpasaṃśrayāt": the euphonic combination (saṃhitā-, on which cf. Pān 1.4.109) is to be understood as [brought about] precisely through the validity of the elision of ya (i.e. the sound y) here [as regards] " $\bar{a}n\bar{u}p\bar{a}$ ", through/because of the not being invariable (i.e. valid without exception) of the rule "pūrvatrāsiddha" (i.e. pūrvatrāsiddham, Pāņ 8.2.1).' Cakrapāņidatta's reasoning seems to be as follows: according to Pāṇ 8.2.1 the rules laid down in Pāṇ 8.2-4 are to be regarded as invalid (asiddha-), i.e. non-existent as regards a preceding rule. Now according to Pān 8.3.17 (bhobhagoaghoapūrvasya yośi), ānūpāļi anūpasamsrayāt gives us ānūpāy anūpasamsrayāt through the substitution of y for the r in $\bar{a}n\bar{u}p\bar{a}h$, the r being obtained from s (i.e. h) according to $P\bar{a}n$ 8.2.66 (sasajuşo ruḥ). This y is elided through the application of 8.3.19 (lopaḥ śākalyasya) giving ānūpā anūpasamśrayāt. The resulting hiatus should be treated according to Pāņ 6.1.101 (akaḥ savarṇe dīrghaḥ), giving ānūpānūpasaṃśrayāt, but since 8.3.19 is to be regarded as non-existent with regard to 6.1.101, no further sandhi takes place in the regular course of events. Or, to put it differently, even if we do obtain two vowels in contact (here: ānūpā anūpasamśrayāt), they are as it were regarded as still being

separated by y, that is, the elision of y has not taken place as regards 6.1.101, i.e. is asiddha. But according to Cakrapāṇidatta Pāṇ 8.2.1 is a rule not valid without exception (anitya-), i.e. is occasional, does not always apply. This being so, the elision of y with regard to 6.1.101 can at times also be siddha-, in which case 6.1.101 applies, resulting in two vowels in contact with subsequent contraction, in this case giving $\bar{a}n\bar{u}p\bar{a}n\bar{u}pasaṇśra-y\bar{a}t$. Of course the whole argument, hinging on the statement that $P\bar{a}n$ 8.2.1 is anitya-, is a trick ($phakkik\bar{a}$ -) of the sort grammarians are known to use to explain forms not covered by $P\bar{a}n$. Unfortunately, I have not been able to find out on what authority or arguments Cakrapāṇidatta's statement on $P\bar{a}n$ 8.2.1 being anitya- may be based.

A similar case of anomalous combination is found in Ca, $S\bar{u}$ 1.6, where we find tapas and $upav\bar{a}sa$ - combined to give $tapopav\bar{a}sa$ - instead of the expected $tapa\bar{u}pav\bar{a}sa$ -. The combination is part of the compound $tapopav\bar{a}s\bar{a}dhyayanabrahmacaryavrat\bar{a}yus\bar{a}m$ (variant: $vrat\bar{a}jus\bar{a}m$), which is part of a śloka, as such metrically guaranteeing the validity of the reading $tapopav\bar{a}sa$. In this case too we have a variant which seems to smoothe over the difficulty caused by the sandhi, namely $upav\bar{a}satapahp\bar{a}thabrahmacaryavrat\bar{a}yus\bar{a}m$.

The combination here is explained by Cakrapānidatta more or less on the same lines as those just discussed: tapopavāseti prayogaļ pūrvatrāsiddhavidher anityatvena tapaļsakārasthānibhūtayalopasya siddhatvāj jñeyaḥ. yathā nopadhāyā iti 'The employment [of]/utterance "tapopavāsa" is to be understood as [brought about] through the validity of the elision of ya (i.e. the sound y), of which the sa (i.e. the sound s) of tapas- is (bhūta-) the sthānin-, through/because of the not being invariable (i.e. valid without exception) of the rule "pūrvatrāsiddha" (see above). As [for instance] "nopadhāyāḥ" (Pāņ 6.4.7).' Another gramatically possible translation of tapahsakārasthānibhūtavalopasva siddhatvāt is: '[brought about] through the validity of the elision of ya (i.e. the sound y), [this y] being the sthanin- of/for the sa (i.e. the sound s) of tapas-', but this is problematic, for the sthānin- 'substituendum' here is not y, but s, for which (via r; see above) y is the ādeśa- 'substitute'. One could try circumventing this difficulty by assuming that Cakrapāṇidatta means that y is, as a substitute for s, itself the sthānin- (substituendum) as regards the elision (here then = substitute), which is however hardly any less problematic. For these reasons the translation first offered is probably correct. In any case, the actual significance of sthānin- here does not basically alter the mode of argumentation, which is the same as above. The only difference is that Cakrapanidatta here also cites Pān 6.4.7 to drive home his point. However, Pān 6.4.7 pertains to the lengthening of the vowel preceding the n of a stem when the genitive plural ending $-n\bar{a}m$ is added (thus e.g. saptan gives saptānām), so that it is not clear why this is cited here. The only reason I can think of is that in this case too we have an elision, namely that of the final n of the stem (according to Pān 8.2.7: nalopah prātipadikāntasya; in our example we thus have sapta for saptan), though even then I fail to see how this is to be connected with the rest of Cakrapānidatta's argument, to which the same remarks apply as above.

Yet another case of anomalous euphonic combination is found in Ca, Ka 12.98, where instead of the correct sadyaüddhṛta- we have sadyoddhṛta-, which in this case fits the metre (dviguṇaṃ tad draveṣv iṣṭaṃ tathā sadyoddhṛteṣu ca). Cakrapāṇidatta does not comment upon this.

12. ardita-, m.

In Ca, Ci 28.72 ardita- is masculine, and obviously a nomen actionis (an affliction), not a participle (sandhicyutir hanusthambhaḥ kuñcanaṃ kubjatārditaḥ). As a nomen actionis (meaning probably 'spasm of the jaws') ardita- is otherwise attested only as a neuter, which is in keeping with the usual gender of nouns ending in -ta- (cf. Wackernagel-Debrunner II,2, §§ 436f.).

13. nantaka-

In As, Ut 19 (p.137b) we find the word nantaka-, which the commentator Indu glosses as gāļanavastra- 'straining-cloth'. nantaka- so far was attested only in Middle Indo-Aryan, namely in Pali (cf. also nantaga- in Prakrit). Turner, no. 10930 connects it with Old Indo-Aryan naktaka-, laktaka- 'rag' and a whole range of other Indo-Aryan words (see also laktakam in Mayrhofer) though there are numerous phonological and semantic problems involved which make a much more detailed and thorough examination necessary.

14. Feminine nominative plural in -īḥ

In Ca, Ci 5.180 the feminine nominative plural kriyāḥ is qualified by raktapittaharīḥ and vātaharīḥ (obviously from raktapittaharī- and vātaharī- respectively). The whole śloka runs:

rudhire 'tipravṛtte tu raktapittaharīḥ kriyāḥ kāryā vātarugārtāyāḥ sarvā vātaharīḥ punaḥ.

'But when blood flows too much, treatments dispelling blood-bile (on this disease see Meulenbeld, pp.627f.) are to be applied, further, of (i.e. for) [her who is] afflicted with wind-disease, all [treatments] dispelling wind.'

Now of course the regular plural nominative forms of 'classical' Sanskrit raktapitta-haryaḥ and vātaharyaḥ would have resulted in the fifth syllable of the respective pāda being heavy, which would have been against the metre. Transferring the stems in -ī- to the -i-declination would not have helped either, as the plurals raktapittaharayaḥ and vāta-harayaḥ would have been even more against the metre. The plural forms the verse does have do fit the metre, but they are archaic, or at any rate not 'classical'.

15. tryāhala-

In Su, Sū 46.59 viṣkira- 'gallinaceous bird' is qualified by or in apposition to tryāhala-. This can hardly mean 'crowing three times; cock', as some of our dictionaries assume, as viṣkira- is the name of a whole class of birds, which are listed in 46.59. The commentator Dalhaṇa explains tryāhala- in the following manner: tribhiś caraṇayugalacañcubhir āhalanti vilikhantīti tryāhalāḥ 'They āhalanti, [i.e.] scratch with the three [which are] the pair of legs and the beak, so tryāhalāḥ.' Similarly, Cakrapāṇidatta in his commentary.on Su, Sū 46.59 (ed. Jādavajī Trikamajī Āchārya and Nandkishor Sharmā Bhishagāchārya, Agra[/Jaipur] 1939) says: tribhiḥ caraṇayugalacañcubhir apahanti vilikhanti bhakṣaṇānveṣaṇārtham iti tryāhalāḥ. hala vilekhana ity asmāt kartary acpratyayaḥ 'On account of looking for food they hack/peck away [the soil etc.] [and] scratch with the three [which are] the pair of legs and the beak, so tryāhalāḥ. To this, [namely] "/hal in [the sense of]

scratching", the suffix a in [the sense of] agent [is added].' If this is correct, then $\bar{a}hala$ is a derivative of \bar{a} / hal , i.e. of a Dhātupāṭha root (/ hal 'plough, furrow'). Of course, even if this derivation is correct, / hal might yet be a secondary derivative of hala- 'plough' (as is usually assumed), but cf. nevertheless $Die\ Sprache\ 33.1987$, pp.96;98 on the worth of the evidence of the Dhātupāṭha.

16. arani-

Ah, Ut 15.4 contains this line describing discomfiture: aranyeva ca mathyante lalāṭākṣibhruvādayaḥ 'And forehead, eyes, brows etc. are as if being churned by a kindling stick (which is twirled for kindling fire).' Arunadatta in his commentary says on this: araṇiśabdaḥ puṃstrīlingaḥ 'The word araṇi- is of masculine and feminine gender.' I am at a loss to account for this remark, for araņi- (also araņī-) 'kindling stick' is, as far as I know, always feminine; moreover, the instrumental aranyā of a masculine arani- would be highly archaic. Our dictionaries do list a masculine arani- 'name of a plant; sun', but this is attested only lexically, and quite apart from this none of these meanings can fit here. There is thus, as far as I can see, no reason for Arunadatta to have made his remark, and yet he has made it, without offering any other explanation, from which I gather that he saw a problem here which in his opinion needed comment, but which was so obvious that it did not have to be expressly stated. But what is it? Indu, commenting on the same verse in As, Ut 18 (p.131a) seems to have seen no such problem, for he makes no similar remark. We can thus only speculate on what caused Arunadatta to make the above remark. The only answer that occurs to me is that he might have commented on a different reading in which arani- was actually a masculine, maybe aranineva instead of aranyeva ca. The trouble is, I have not been able to find any trace of this or a similar reading. Maybe a really critical edition of Ah will be able to shed some light on this matter.

17. Hiatus

I have noted the following cases of hiatus not in keeping with the rules of sandhi in verses: Ca, Si 7.4c: kā cikitsā iti, Ah, Ni 15.20c(variant): aśnuvīta iva, Ca, Ci 1.1.63c: abhayā cāmṛtā ṛddhir, Su, Ci 7.9cd: kuśaḥ kāśaḥ śaro gundrā itkaṭo, Su, Ut 62.31ab: jyotiṣmatīṃ nāgaraṃ ca anantām, Ah, p.36b (a variant to As, Sū 3 (p.21a) in some manuscripts of Hemādri's commentary on Ah, Sū 2.48): nānuvānto na udvṛtto. A further case I found in the Kāśyapasaṃhitā (ed. Jādavjī Trikamjī Āchārya and Somanāth Śarmā, Muṃbaī 1938), Khilasthāna 9.24: yadā ṛtumatī nārī. Ca, Ci 30.112c (vasā ṛkṣa-varāhā-nāṃ) might also be considered, but here we probably have a plural vasāḥ, which would give a regular hiatus.

18. upa./viś 'void (stool)'

To say that a sick person (ātura-) passes stool (varcas-), Ca, Ci 13.44 uses upaveśate (api cāturaḥ salohitanīlapītapicchilakuṇapagandhy āmavarca upaveśate 'And moreover the sick person passes dark, yellow, slimy, putrid smelling, not fully metabolised stool together with blood'). Cf. in this context upaveśa- 'stool', which is so far attested only lexically. It is also to be noted that, while upa/viś 'sit down' is conjugated, usually in the

active voice, according to the sixth verbal class (upaviśati etc.), upa/viś 'void (stool)' follows the first verbal class and is conjugated in the middle voice.

19. apūpa- and pūpa-

20. cācā-

In Ah, Ut 24.24 and 24.31 and in As, Ut 28 (p.205a) we find a disease called cāca- or cācā- mentioned. The length of the end vowel is unclear since the word is combined in euphonic combination: cācāruṃṣikayos tailam abhyangaḥ (variant: °ge) kṣuraghṛṣṭayoḥ (variant: kşuramṛṣṭa°) in Ah, Ut 24.24 (Hilgenberg-Kirfel, pp.634;844 obviously silently emend $c\bar{a}c\bar{a}^{\circ}$ to $vac\bar{a}^{\circ}$, taking this imaginary $vac\bar{a}$ - to be a disease of the head), $tail\bar{a}kt\bar{a}$ hastidantasya maşī cācauşadham param in Ah, Ut 24.31 (variants: maşī vāpy au° and maşī vā cauşa°; Hilgenberg-Kirfel, l.c. seem to follow the first variant) and tathā cācoktam citrakāditailam abhyañjanam in As, Ut 28 (p.205a). Commenting on the latter, Indu remarks: cācā indralupta ity ekārthaḥ, i.e. cācā- is a synonym of indralupta-, which is the name of a certain type of baldness. Whether Indu is right in saying that the disease is $c\bar{a}$ cā- (and not cāca-), and whether indeed cācā indralupta ity (and not cāca indralupta ity) is what he actually wrote, I have no means of ascertaining, but, whether the disease be cāca- or cācā-, it does seem as if his equation of this with indralupta- is correct, for in another edition of As (ed. Gaņeśa Tarţe, Mumbāpura Śaka 1810) we find (on p.283) indraluptoktam citrakāditailam abhyanjanam instead of tathā cācoktam etc. Moreover, a passage in which a preparation (a taila-) from citraka- (and other substances) is used as a medicine for indralupta- follows a few lines after the lines just mentioned (p.205b and p.284 respectively). Also, Ah, Ut 24.31 is preceded by a passage (24.28ff.) detailing various treatments for indralupta-.

21. dhūpyati, dhūpyate

Su, Ni 11.5 contains the puzzling verb-form $dh\bar{u}pyati$. The word is contained in a description in verse, in the Indravajrā metre, of the effects of a certain form of granthi-(morbid swelling):

dandahyate dhūpyati cūṣyate ca pāpacyate prajvalatīva cāpi raktaḥ sapīto 'py athavāpi pittād bhinnaḥ sraved uṣṇam atīva cāsram '[Arisen] due to bile, [coloured] red, or again also with yellow [colour], it is greatly inflamed, dhūpyati, and is scorched [as if being sucked dry], boils (i.e. hurts) excessively and also flames up, as it were. And split, it emits exceedingly hot blood.'

According to Palhana - Gayadasa does not comment upon this word - dhūpyati means 'makes burning/pain', i.e. 'burns/pains' (dhūpyati cātimātram atiśayena santāpam karoti) (Dalhana is here commenting on dhūpyati cātimātram 'and dhūpyati excessively', listed in the edition as a variant to the reading dhūpyati cūşyate ca 'dhūpyati, and is scorched'). In view of the fact that the sensations described are all those of burning, i.e. intense pain, coupled with the flow of very hot blood, this cannot be far off the mark. One could only point to cūṣyate, literally 'is sucked (up)', as perhaps not fitting into this scheme, as the meaning given in the translation above is not as a rule found in our dictionaries. But cf. coşa- 'drying up, withering; burning', common in medical texts. In Su coșa- is also often compounded with oșa- 'burning'. A cursory check turned up such compounds in Sū 17.5, 21.32 and 22.11, Ni 5.8 and 5.10, Ci 37.67 and Ut 38.24, in the first four instances another member of the compound being partdaha- 'consuming heat'. Dalhana, commenting on Sū 22.11 and Ci 37.67, tells us that, though usually taken to mean 'pain as if being sucked dry' - he offers this explanation in all the instances mentioned except Ut 38.24 -, coșa- is by some authorities explained as 'thirst'. Gayadāsa also says this in his commentary on Ni 5.8: coşaś cūşaṇam iva. pipāsety anye. However, though 'thirst' may fit in some cases where what exactly is meant is unclear, in a great many cases, as also in the compounds mentioned here, it will not. Thus cūşyate would in Ni 11.5 seem to fit into the picture painted by the other verbs (i.e. describes pain caused, as it were, by being dried out, the picture in contexts such as the above probably being that of being withered by a fire, though the original picture is obviously that of being sucked dry), and as such is not an impediment to dhūpyati probably meaning something similar to these.

But what sort of a form is *dhūpyati*? The verb $\sqrt{dh\bar{u}}$ 'shake' can also mean 'kindle; injure, hurt', but our dictionaries list no verbal forms with p derived directly from the root $\sqrt{dh\bar{u}}$. Nevertheless, it is theoretically possible to postulate a causative $dh\bar{u}payati$ with p meaning 'kindle; injure, hurt' (i.e. in the same meaning as the transitive simplex $dh\bar{u}noti$; cf. Paul Thieme, Das Plusquamperfektum im Veda, Göttingen 1929, p.22). We might then further postulate a passive from $dh\bar{u}payati$ in the sense of an intransitive (i.e. 'burn; pain, hurt' or the like as an intransitive from the passive 'be kindled; be injured, be hurt'; cf. on this function of the passive e.g. Renou, § 342, Speijer, pp.239f.).

Now there actually does seem to be evidence that there was, at a very old stage of Indo-Aryan, just such a causative with p (see Mayrhofer on $dh\bar{u}pah$). Its meaning however is 'make smoke; fumigate, obscure with vapour; perfume'. As non-Indo-Aryan languages show, $\sqrt{dh\bar{u}}$ is in fact connected with words meaning 'smoke' or the like in many Indo-European languages (cf. Mayrhofer on $dh\bar{u}noti$ and $dh\bar{u}mah$), though in Indo-Aryan the root $\sqrt{dh\bar{u}}$ and its verbal forms are as a rule not connected with 'smoke' or the like, in contradistinction to derived non-verbal forms. On the inner-language level of Indo-Aryan this verbal form, $dh\bar{u}p\bar{a}yati$, is however analysed not as a verbal form with p derived from $\sqrt{dh\bar{u}}$ directly, but as a denominative derived from $dh\bar{u}pa$ - 'vapour; incense, perfume' (Mayrhofer on $dh\bar{u}pah$ holds $dh\bar{u}pa$ - to be a back-formation from $dh\bar{u}p\bar{a}yati$). But, whether or not $dh\bar{u}p\bar{a}yati$ in the meaning just given be a causative or a denominative, the meaning ascribed to it hardly seems to fit in the context of Su, Ni 11.5, in contrast to the meaning of the causative we have considered in the last paragraph, such a causative however not being attested.

However, there is also a word *dhūmāyana*, obviously linked to the denominative *dhūmāyati* 'smoke, steam; obscure with smoke' derived from *dhūma*- 'smoke, vapour'.

Now dhūmāyana- 'smoking' is also used to mean 'burning, heat; fever' in medical texts. Indeed, in Su, Sū 21.32 and 22.11 and Ni 5.8, mentioned above, it is even compounded with the other words for 'heat' or the like mentioned: oṣacoṣaparidāhadhūmāyanāni. Dalhana explains dhūmāyana- in his commentary on the first two of these passages, as well as on dhūmāyana- (not compounded) in Ka 8.86, with the words: dhūmāyanam dhūmodvamanam ivāngānām (Sū 21.32: only iva) 'dhūmāyana- is, as it were, the emission of smoke (of the members of the body)' (Sū 21.32: the bracketed part is missing), similarly in the commentaries on Ut 6.7, where dhūmāyana- is not compounded (dhūmāyanam dhūmasyevodvamanam), and Ni 5.8 (dhūmāyanam dhūmopahatasyeva <?; does he mean: suffocated as if by smoke? >. dhūmodvamanam ivāngānām ity eke; Gayadāsa on this passage says simply: dhūmāyanam dhūmodvamanam ivāngānām). The picture is obviously that of a fire which emits smoke, and this explains well the meaning taken on by dhūmāyana-. This being so, might not dhūpāyati 'make smoke; fumigate, obscure with vapour; perfume' also have assumed the meaning 'burn (transitive and/or intransitive)' in this specialised medical sense, the passive of this then meaning 'burn (intransitive)' or 'be burned', i.e. 'pain, hurt'?

Thus we seem to arrive at the meaning 'pain, hurt' for the passive via both the postulated p-causative of $\sqrt{dh\bar{u}}$ 'kindle; injure, hurt' and the attested causative or denominative of $dh\bar{u}pa$ -, namely $dh\bar{u}p\bar{a}yati$ 'make smoke; fumigate, obscure with vapour; perfume'. The snag in this is of course that the passive form we are considering should be $dh\bar{u}pyate$ and not $dh\bar{u}pyati$, which is what we have in Su, Ni 11.5. One could now hold that there may have been an analysis of the original passive as a middle form of the fourth verbal class (which is often used to express intransitivity; see Renou, § 312, Speijer, l.c.), resulting in a subsequent transference to the active voice. But the reason for the use of $dh\bar{u}pyati$ may just as well have been metrical, for the metre of Su, Ni 11.5 demands a short vowel in exactly the position of the ti of $dh\bar{u}pyati$, which may thus actually be an ad hoc formation due to the exigencies of metre and mean the same as $dh\bar{u}pyate$ 'burn' i.e. 'pain, hurt'. In any case, the transference of verbs from a medio-passive to an active conjugation is not rare in non-'classical' Sanskrit.

That it is indeed most probable that dhūpyati has been formed from a passive is borne out by Ca, Sū 18.7.2 and Ci 13.28, where we actually find the form dhūpyate. In the first case, the verb is part of a chain of verbs contained in the description of the symptoms of morbid intumescence (śotha-) due to bile: uşyate dūyate dhūpyata ūşmāyate svidyate klidyate na ca sparśam uṣṇaṃ ca suṣūyate (variant: sahate) 'burns, is consumed with fire, dhūpyate, emits heat, sweats, is moist and does not like (variant: bear) touch and heat'. The second passage tells us of the abdomen (udara-) in a morbid distended state: dahyate dūyate dhūpyata ūşmāyate svidyate klidyate mṛdusparśam kṣiprapākam ca bhavati 'is inflamed, is consumed with fire, dhūpyate, emits heat, sweats, is moist, is soft to the touch and of speedy maturation'. Here too we see that a meaning 'burns' in the sense of 'hurts, pains' for dhūpyate agrees well with the other verbs. What is most interesting is the explanation of dhūpyate Cakrapāņidatta offers us: dhūpyata iti dhūmam ivodvamati (thus on Ci 13.28; iti is missing in the commentary on Sū 18.7.2) "dhūpyate": emits, as it were, smoke', which tallies exactly with what Dalhana in his commentary on Su, Sū 21.32 and 22.11 and Ka 8.86 has told us with regard to dhūmāyana-. Cakrapānidatta's explanation also makes it seem most probable that dhūpyate is derived from the attested causative or denominative and not the postulated causative (even if we bear in mind the caveat that his explanation may actually refer to a secondary etymological re-interpretation of an original causative form), which would tally with the fact that no causative forms with p of $\sqrt{dh\bar{u}}$ 'kindle; injure, hurt' are attested.

Finally, we have another passive form of the very same verb, this time from Su itself, namely in Su, Ut 25.6 (whose anacoluthic construction reminds one of Ut 56.4 in 1 above):

yasyoşnam angāracitam yathaiva dahyeta dhūpyeta śiro'kşināsam śītena rātrau ca bhaved viśeşaḥ śirobhitāpaḥ sa tu pittakopāt

'Whose head, eyes and nose should [happen to] be inflamed [and] burn (dhūp-yeta), hot as if heaped with coals, [of whose affliction] a favourable turn (viśeṣa-) should [happen to] transpire due to cold and at night, the [affliction of that person], intense pain (abhitāpa-, lit.: heating) in the head, is however due to the excitation of bile.'

22. vilayet

While describing the treatment of a certain hard type of gulma- ('unusual growth [in the abdominal region]'), Ca, Ci 5.52 says that, after the gulma- has been examined and sudated, the physician should perform a certain action with respect to it, this action being described by the verbal form vilayet (dṛṣṭvādau svedayed yuktyā svinnam ca vilayed bhişak). vilayet, which other editions also have, is difficult to explain: it could be a form of $vi / l\bar{t}$ 'dissolve; disappear' or of / vil (= / bil) 'break; cleave'. Both derivations are however problematic. $\sqrt{l\bar{\iota}}$ 'dissolve; vanish' (on which cf. Gotō, p.279) seems to be attested conjugated according to the first verbal class only in older Vedic texts. Moreover, both \$\sqrt{l\tilde{l}}\$ and \$vi\$\$\sqrt{l\tilde{l}}\$ have to my knowledge only been found used intransitively so far, whereas vilayet could only be a transitive here ('should make it dissolve/disappear'), i.e. be used in the function only the causative of this verb seems to have. As regards $\sqrt{vil(/\sqrt{bil})}$ — on this root see also Mayrhofer on bilmam —, this is listed by our dictionaries as a Dhātupāṭha root only, though this does not necessarily preclude its actually having been used in some text or the other which our dictionaries have not yet utilised. Also, even though according to the dictionaries we should, if the above form in Ca, Ci 5.52 should indeed be derived from this root, have expected *velayet*, that in itself does not speak against a form vilayet too having been formed from the root.

The trouble is that the text of Ca does not give us any details on the action of the physician it refers to by vilayet. The parallel passage Ah, Ci 14.78 however has vinayet 'one should drive away/expel' in the place of Ca's vilayet ($\bar{a}n\bar{a}h\bar{a}diyutam$ gulmam samsvedya vinayed anu, with a variant samsodhya for samsvedya). The commentator Arunadatta glosses vinayet with upasamayet 'one should make to cease'. On the one hand, this could speak for vilayet being derived from $vi/l\bar{\iota}$, and as such an otherwise unattested transitive form: '(the physician) should make dissolve/disappear'. But on the other hand, the reading of Ah also raises the possibility that vilayet may be simply an old mistake for vinayet, caused maybe by a scribal error in a script which did not differentiate clearly between n and l. Yet against this one could also hold that vinayet may in actual fact be a secondary lectio facilior for a difficult original vilayet. A final decision is difficult not only because of the lack of critical editions I have already remarked upon, but also because the Ah too does not give us any further details. Another parallel passage, As, Ci 16 (p.233b), however tells us that the gulma- is to be sucked into a small jar (ghatikā-) placed over it. This is done by pressing the mouth of the jar on the affected area and

kindling a small fire in the jar — cf. e.g. Ah, Sū 25.28 and As, Sū 34 (p.243b) — to create a partial vacuum within it. The jar is to be forcibly removed or broken (ghatīm apanayed bhindyād vā), after which one should cover the gulma- with a cloth and pound and press it (gulmam ... prapīdayet pramṛjyāt). Is this action what the Ca (and also the Ah) passage is referring to? One could take this description to refer to a breaking or cleaving of the gulma- and hence derive vilayet from /vil. But the As passage goes on to tell us that after this procedure the gulma- should be, after a subsequent sudation, 'removed from its place' and 'made flaccid' (evam amunā krameṇa sthānād apasṛte śithilībhūte ca gulme ...), which seems rather to mean a malleable mass than broken pieces. Moreover, the Ca passage refers to sudation before the process for which it uses vilayet. It seems that the sudation serves to make the gulma- soft, which too would, if we may indeed presuppose the procedure of the As passage here too, speak rather more for a transformation into a malleable mass than for a shattering into pieces, and that then would speak against a derivation from /vil, which would leave the possibility of a derivation from vi/lī.

What seems to decidedly tip the scales in favour of a derivation from $vi/l\bar{\iota}$ is the description of the use of the 'jar' in the already mentioned Ah, $S\bar{u}$ 25.28 and As, $S\bar{u}$ 34 (p.243b), which tell us that this 'jar' is used for the unnamana- 'raising' and vilaya(na)- 'dissolution/disappearance' of a gulma- (Ah: tadvad gha $\bar{\iota}$ hitā gulmavilayonnamane ca sā, As: tadvad eva ca mānakarmābhyāṃ gha $\bar{\iota}$. sā tu gulmonnamanavilayanārthaṃ ca). vilaya(na)- is of course derived from $vi/l\bar{\iota}$, and that would speak not only for vilayet in Ca, Ci 5.52 too being derived from $vi/l\bar{\iota}$ (transitive), but also for vinayet in Ah, Ci 14.78 probably being a mistake or a secondary lectio facilior for vilayet. If these deductions should be correct, then it also remains to be examined whether the rare conjugation of the transitive $vi/l\bar{\iota}$ according to the first verbal class serves to differentiate it from the intransitive $vi/l\bar{\iota}$ conjugated differently.

A word of caution would however not be amiss here, for in the commentary on Ca, Ci 5.52 by Jejjata/Jajjata (cf. 4 above) we find not vilayet, but vinayet, which is explained by pīdayet 'should press/squeeze'. However, vi/nī does not mean 'press/squeeze'. Is the commentary therefore elliptically referring to the removal of the gulma- by pressing or squeezing? But this could then equally be regarded as an explanation of vilayet as a derivative of vi/lī (though probably not as a derivative of /vil, as /pīḍ 'press, squeeze', which would be in keeping with a malleable mass, seems in this case not to be an appropriate synonym for Jvil 'break, cleave'; see above). When we consider what has been said above on the reading vinayet in Ah, Ci 14.78 and the fact that the only extant manuscript of the commentary of Jejjata/Jajjata is much damaged and corrupt, we may be permitted to doubt whether Jejjața/Jajjața really read vinayet instead of vilayet. But even if he did, this can only have been a variant for vilayet, which in the light of vilaya(na)- of the Ah and As passages quoted above does seem to be the original reading. But be that as it may, we see that in the case of the commentary too we have a text-critical problem. Indeed, even very important commentaries on the ancient medical texts are often, as regards editing, in an even worse state than the texts they comment upon.

23. nirbhatsayanti or nirbhartsayanti?

As, Ci 2 (p.105b) says:

vācah sisūnām avyaktā yoşito madanāturāh dāham nirbhatsayanty āsu sajjanānām ca sūnṛtāh 'The inarticulate sounds of children, the love-sick [sounds, here probably words] of a woman, and the pleasant/friendly [sounds, i.e. words] of good men quickly nirbhatsayanti burning (scil. pain).'

The same passage (Ci 2.79) in the As edition of Anamt Dāmodar Āṭhavale (Puṇeṃ 1980) also reads dāham nirbhatsayanty āśu. However, the edition of Tarṭe (see 20) has dāham nirbhartsayanty āśu on p.11, i.e. nirbhartsayanti instead of nirbhatsayanti. In both cases the meaning of the verb must be 'remove', 'drive away' or the like, since in the same passage, in the verses preceding and following the above, we find verbs such as naśyati 'be lost, disappear', haranti 'remove; subdue', apanayet 'should remove' etc. in similar contexts.

The question now is: which reading is the correct one? At first glance the answer seems to be obvious: it is nirbhartsayanti, since nis /bharts 'threaten, menace' has also taken on the meanings 'rebuke; mock; outstrip, surpass', the latter being semantically very close to 'conquer, vanquish', as is shown e.g. by Cārudeva Śāstrin, Upasargārthacandrikā 2, Dillī/Vārāņasī 1978, p.224, where we find, besides paścātkṛta- 'left behind, surpassed' and atiśayita- 'excelled, surpassed', also nirjita- 'vanquished; surpassed' given as a synonym of nirbhartsita-, the participle of nis/bharts. Now the quotations from Sanskrit literature adduced here actually all presuppose a meaning 'surpass' or something similar for nis/bharts, but we see from the semantic range of nirjita- and the fact that it is mentioned in such a context that 'excel, surpass' as such does have semantic points of contact with 'vanquish, conquer' in Sanskrit. 'Vanquish, conquer' would indeed fit into the As verse, but it is also possible to postulate a further semantic shift to the closely allied 'drive away' here. What seems to make all this very probable in the case of nirbhartsita- is the meaning given for 'bharts + nis' in the smaller Petersburg Dictionary (pw), namely 'übertreffen, verschwinden machen', i.e. 'surpass; make vanish'. The trouble is that the latter meaning is based only on Śiśupālavadha 12,69 in a very old edition (Calcutta 1815) which seems to be the only one having nirbhartsita- in this verse, all later editions having instead nirbhasmita-. This latter is commented upon by Mallinātha and according to Schmidt on nirbhasmita the correct reading is: gāngaughanirbhasmitaśambhukandharāsavarnam arnah 'water/a stream whose colour is the same as [that of] Sambhu's neck, from which the ash has been removed by the flood/flow belonging to the Ganga'. The reference here is to the dark waters of the Yamunā. Thus, though it is possible to presume that nis Jbharts may have developed the meaning 'drive away' or the like, we actually have no real proof for this supposition.

On the other hand, Indu in his commentary on As, Ci 2 (p.105b) actually mentions nirbhatsayanti, though he does not comment further upon it. This would seem to make it unlikely that nirbhatsayanty āśu in the As verse above is merely misprint, as that would presuppose the very same mistake in the commentary too. One could of course opine that nirbhatsayanti is on both occasions merely the result of editorial error, but can we simply assume that that the editor, a very good Sanskritist, should not have thought of nirbhatsayanti in this context too? Since he has nevertheless stuck to nirbhatsayanti, he might have had some reason for doing so, the more so since at least one other edition of the text has the same reading. But in this regard one must also not overlook the fact that this latter edition, while having the same reading in the text commented upon, actually has nirbhartsayanti in Indu's commentary. This complicates matters considerably: is the latter reading a mistake or a wrong 'correction', or is, on the contrary, the reading nirbhatsayanti of the commentary in the other edition a mistake? In any case, the occur-

rence of this latter verbal form in two different editions and in one edition of the commentary does force us to examine it more closely.

Now what first strikes one as regards nirbhatsayanti is its similarity to bībhatsate 'feel aversion, loathe', which is commonly regarded as a desiderative form of \$\sqrt{b\bar{a}}dh\$ 'press; remove; resist'. According to Mayrhofer on \$b\bar{b}bhatsate\$, the connection of \$b\bar{b}bhatsate\$ with \$\sqrt{b\bar{a}}dh\$ is however not certain. Nevertheless, \$nis\sqrt{b\bar{a}}dh\$ 'keep off, ward off' does make it semantically very tempting to connect \$nirbhatsayanti\$ with \$nis\sqrt{b\bar{a}}dh\$. However, what sort of a form would \$nirbhatsayanti\$ be if it were indeed derived from \$nis\sqrt{b\bar{a}}dh\$? It is extremely difficult to answer this question satisfactorily, and the same holds good for a possible connection one might construe between \$nirbhatsayanti\$ and \$nis\sqrt{b}adh\$ (nis\sqrt{v}adh) 'strike away; sever, separate'.

To sum up: In the case of *nirbhartsayanti* there are no morphological problems, and it is possible to postulate a semantic development leading to a meaning which would fit well into the *As* verse. On the other hand, we have no actual proof for such a semantic development really having taken place. In the case of *nirbhatsayanti* we have great morphological difficulties with the derivations considered, though semantically there are no great problems. Moreover, Indu seems to presuppose the latter reading according to one edition of his commentary.

Matters are not made easier by As, Śā 12 (p.368a). In this passage, which describes the omens of bad dreams, the dreamer is once *nirbhatsyate* $v\bar{a}$ *kupitaiḥ pitṛbhiḥ*. This most probably means: 'or is rebuked by angry manes' (cf. e.g. Ca, In 5.34 = Ah, Śā 6.54: *prakupitaiḥ pitṛbhiś cāvabhartsanam*), i.e. *nirbhatsyate* here is in all probability a mistake for *nirbhartsyate*, and this latter is indeed what the editions of Tarṭe (p.254) and Āṭhavale (Śā 12.15) have. Indu does not comment upon the word.

The mistake here seems obvious, and this does make one wonder whether *nirbhatsayanti* in the first passage we examined might not be the result of a similar mistake. On the other hand, the contexts of the two passages are quite different. Thus, though we do seem to have a mistake in As, Śā 12 (p.368a), this does not automatically mean that we must needs have one in As, Ci 2 (p.105b) too. Nevertheless, we do see from the mistake in the former passage that the possibility of an editorial mistake as regards the latter passage is not to be dismissed out of hand, and this means that the possibility that the reading *nirbhatsayanti* is simply a mistake for *nirbhartsayanti* becomes larger.

I am however unable to adduce anything more which would tip the balance one way or the other, and must thus end on a note of *non liquet*. A decision in this matter will be possible — if at all — probably only when we have a really critical edition of the As at our disposal.

24. *viśira-*?

Ca, In 7.5f. describe the $ch\bar{a}y\bar{a}$ - (in 5) or $praticch\bar{a}y\bar{a}$ - (in 6), i.e. reflection or shadow (which exactly is meant, is unclear) of persons about to die ($mum\bar{u}r\bar{s}at\bar{a}m$). Amongst its different characteristics mentioned we also find $vi\dot{s}ira$ - 'headless' ($na\dot{s}t\bar{a}$ $tanv\bar{\iota}$ $dvidh\bar{a}$ $chinn\bar{a}$ $vik_{\bar{\iota}}t\bar{a}$ $vi\dot{s}ir\bar{a}$ ca $y\bar{a}$). Now even though there are a few cases in which $\dot{s}iras$ - as the latter member of a compound is shortened to $\dot{s}ira$ - (see e.g. Wackernagel-Debrunner II,1; § $41b\alpha$), such shortening is by no means common, so that one does feel inclined to ask whether $vi\dot{s}ir\bar{a}$ (in all the editions I consulted) may not actually be a(n editorial?) mistake for $vi\dot{s}ir\bar{a}\dot{s}$ (maybe written in manuscripts as $vi\dot{s}ir\bar{a}h$, as is often the case), wrongly analysed

as a plural. This is obviously a text-critical problem, but unfortunately here too the editions at our disposal do not allow us to make any definite statements.

25. nirvātyate

In his commentary on Su, $S\bar{u}$ 34.6f. Palhaṇa quotes a Śloka which according to him some authorities recite after 7ab:

vişvagvātādibhir yadvad dīpas tailādisaṃyutaḥ nirvātyate kṣaṇād dehī tathaivāgantumṛtyubhiḥ

'Just like a lamp furnished with oil etc. [nevertheless] nirvātyate instantly through wind from all quarters (Dalhaṇa: prabalavāta-, i.e. very strong wind), etc., so [too does] a corporeal being through adventitious deaths.'

There can hardly be any doubt that *nirvātyate* means 'is extinguished', or, more precisely, 'is blown out'. One could think of connecting it with \(\struct vat \) 'fan', but this is extremely problematic, not only because this verb is in Indo-Aryan attested only in the \(\bar{Rgvedasamhita} \) and only with the preverb \(api \), but also because the meaning 'fan' is doubtful (cf. \(\text{Goto}, \text{pp.280f.}, \text{ with further literature} \)). What seems much more probable is that we here have a form of the (attested) denominative \(v\text{atayati} \) 'fan' of \(v\text{ata} - \) 'wind'.

This derivation too is however not free of problems, for a combination of this denominative with the preverb *nis* is not attested. A denominative from *nirvāta-* does not seem possible either, as *nirvāta-* means 'without/free from wind', which would not fit here. Thus the question whether the text really does have *nirvātyate* does seem justified. Could this actually be a mistake for the non-problematic *nirvāpyate*? The meaning would be the same. We thus ultimately end up with another text-critical problem, which will have to await resolution through a critical edition of the text at some future date.

Abbreviations not explained in the Introduction

Ci Das

Gotō

Hilgenberg-Kirfel

In Ka

Mayrhofer

Mayrhofer EW

Meulenbeld

Ni Pāṇ Renou Śā Schmidt Ciktsāsthāna/Cikitsitasthāna.

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Sū Sūtrasthāna.

Turner R.L. Turner, A Comparative Dictionary of the Indo-Aryan Languages,

reprint London 1973.

Ut Uttarasthāna/Uttaratantra.

Vi Vimānasthāna.

Jacob Wackernagel and Albert Debrunner, Altindische Grammatik I,
Göttingen ²1957.

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Wackernagel-Debrunner II,1 Idem II,2, Göttingen 1954. Idem III, Göttingen 1930.

Wackernagel-Debrunner II,2

Wackernagel-Debrunner III

Ravigupta's Siddhasāra: New Light from the Sinhala Version

JINADASA LIYANARATNE

Ravigupta's $Siddhas\bar{a}ra$ (Si) came to the notice of European scholars early in the 20th century. In 1902 the French medical practitioner and scholar, Palmyr Cordier, gave a brief description of this treatise in a paper he read at the Congress of Orientalists in Hanoi on Sanskrit medical MSS newly discovered in India (1898-1902). In 1903, in an article on the Sanskrit medical texts included in the Tanjur, he gave an analysis of the contents of the Tibetan version of the Si^1 .

Cordier refers to an incomplete MS of the Siddhasāra-saṃhitā comprising 1212 granthas, in prose and verse, preserved at the Durbar Library in Nepal. As the MS examined by H. Śāstrī (97 palm-leaf folios in Newari script) is said to be in prose and verse, it should be the text with commentary or translation (cf. the Sinhala term sanne below.)

Cordier points out that the treatise was often quoted in later medical literature and that a second, equally incomplete, codex, brought to light not long ago (in reference to 1902), corroborated unpublished data furnished by certain commentators, revealing numerous ślokas borrowed by Vṛnda and Cakrapāṇidatta from the Si.

In the '30s, the Khotanese and Tibetan versions of the Si were studied by H.W. Bailey from the point of view of Khotanese and Tibetan philology². However, the credit of bringing the Si to the limelight goes to Ronald E. Emmerick (University of Hamburg), whose researches on this treatise for over two decades have yielded a rich harvest of philological data, elucidating the full text of the Si in the original Sanskrit as well as in its Khotanese and Tibetan versions³.

It is strange that this important medical treatise has not been edited so far in India, the homeland of Āyurveda, nor in any other South Asian country (cf. footnote 7). P.V.

¹ 'Récentes découvertes de MSS médicaux sanscrits dans l'Inde (1898-1902)', Le Muséon, n.s. IV, 1903, p.336; 'Introduction à l'étude des traités médicaux sanscrits inclus dans le Tanjur tibétain', BEFEO, Hanoi 1903, pp.22-24. Prior to that, as far back as 1899, Cordier referred to the Si in a pamphlet: Quelques données nouvelles à propos des traités médicaux sanscrits antérieurs au XIIIe siècle, Calcutta 1899, p.7.

² See the following publications by H.W. Bailey quoted in Emmerick 1971 pp.91-92: 'Iranian Studies, V', BSOS, VIII.1, 1935, 117-42 (a list of Khotanese words from the Siddhasāra together with Tibetan equivalents and other information); Codices khotanenses, Copenhagen 1938 (facsimile of a MS containing the Khotanese version); Khotanese texts I, Cambridge 1945, repr. 1969 (pp.1-145 contain the Khotanese text in transcription along with the Tibetan version and the parallels in the Sanskrit text).

³ See R.E. Emmerick, 'The Sanskrit text of the Siddhasāra', BSOAS, XXXIV.1, 1971, 91-112; 'On Ravigupta's gaṇas', BSOAS, XXXIV.2, 1971, 363-375; 'New light on the Siddhasāra', BSOAS XXXVI.3, 1974, 628-654; 'Ravigupta's place in Indian medical tradition', Indologica Taurinensia, III-IV, 1975-76, [1977], 209-221; The Siddhasāra of Ravigupta, Vol. 1: The Sanskrit text, Wiesbaden 1980; The Siddhasāra of Ravigupta, Vol. 2: The Tibetan version with facing English translation, Wiesbaden 1982.

Sharma says, however, that several verses of this work 'are borrowed by Vrnda in his Sid-dhayoga (900 A.D.), and it is often quoted by Candrata (early 10th century A.D.)'4.

Emmerick places Ravigupta in the 7th century A.D. (ca. 650), immediately after Vāgbhaṭa (ca. 600), to be followed by Mādhava (ca. 700)⁵.

To establish the Sanskrit text of the Si, Emmerick has used the Tibetan and Khotanese versions, and six Sanskrit palm-leaf MSS (A 1374 AD; B 1443 AD; C 1114 AD; DEM undated). Of these six MSS, the first five, written in the Newari script, are from Nepal, and the sixth, written in the Malayalam script, is from Kottayam (South India). Thus, Emmerick's edition of the Si is based mainly on MS traditions of the North of the Indian sub-continent, only MS M representing a Southern tradition. The last-mentioned MS, 'a fragmentary worm-eaten palm-leaf MS', was received by Emmerick after his 'edition based on the five Nepalese MSS had been submitted for publication' and 'it has not been possible to make full use of it' (Emmerick 1980 p.5). A southern MS tradition is also found in Sri Lanka and that is the subject of the present paper⁶.

There are two complete Sinhala translations of the Si^7 , a palm-leaf MS preserved at the Bandaranaike Memorial Āyurvedic Research Institute at Nawinna (13 km to the east of Colombo), and a microfilm of a palm-leaf MS in the possession of the Sri Lanka National Archives in Colombo. These two MSS are referred to in the present paper as K (from Katana, pronounced Kaṭāna), and W (from Wellawa, pronounced Vällava) respectively. Both MSS are written in the Sinhala script.

I use the expression 'Sinhala version' in reference to the text given in MSS K and W, 'Tibetan version' in reference to Emmerick's English translation of the Tibetan version (Emmerick 1982), and 'printed edition' in reference to his edition of the Sanskrit text (Emmerick 1980).

⁴ Introduction to Dravyaguna, Varanasi 1976, p.100.

⁵ Emmerick 1980 p.1.

⁶ I am thankful to Dr Arion Roşu for drawing my attention to the Si and for encouraging me to pursue the study of the Sinhala version.

⁷ It should be noted that in Sri Lanka the title of the work is always given as *Siddhisāra* 'The Essence' or, 'The Best - of Effective Medical Formulae' and not as *Siddhasāra* 'The Perfect Selection.'

The work is not noticed in the major catalogues of Sri Lankan palm-leaf MSS such as the following: W.A. de Silva, Catalogue of Palm-leaf MSS in the Library of the Colombo Museum, vol. 1, Colombo 1938; C.E. Godakumbura, Catalogue of Ceylonese MSS, Copenhagen 1980; D.M. de Z. Wickremasinghe, Catalogue of the Sinhalese MSS in the British Museum, London 1900.

K.D. Somadasa, in his Lankāvē puskoļa pot nāmāvaliya, vol. 1, Colombo 1959, mentions a title, Siddhisāraya (śiroroga-cikitsā), one copy of which is supposed to be at the Nandanaramaya, Opata, Akuressa (Galle district), and two others at the Jayawardhana Mudalindaramaya, Walasgala (Matara district), both in the Southern province. From the sub-title it seems that it is a part of a larger work.

A printed edition of the Si in Sinhala prose and Sanskrit ślokas is mentioned by Kiriällē Ñāṇavimala in his edition of the Varayogasāraya, Colombo n.d., [1966], p.vii. But no other information is given about that publication.

The fact that I managed to trace the two MSS K and W during my search for Sinhala medical MSS shows the importance of making a complete survey of Sri Lankan palm-leaf MSS as I have pointed out in my article 'The literary heritage of Sri Lanka (A case for the preservation of palm-leaf manuscripts)' in Studien zur Indologie und Iranistik, 15, 1989, 119-127.

MS K

The total number of folios is 169, including a fly-leaf at the beginning and another folio (numbered tr) giving the contents. The folios are numbered from ka to tr, that with the beginning of the text being left unnumbered, with the usual benedictory formula svasti siddham written on the left margin. A second series of Arabic numerals is stamped on the left margin, probably by the Ayurvedic Research Institute. In the latter numbering, folio gha (49) has been skipped. Each folio measures 28×5 cms. There are 8-9 lines to a folio, and 60 akṣaras per line. The handwriting is good and the letters are fairly big.

The palm leaves are held together with two wooden covers (pot kamba), the exterior of which is painted with floral designs (usual liyaväla in the middle and palāpeti on the borders). According to a paper label pasted on the lower wooden cover⁸, the MS was presented by Mr. L. Paul Fernando of Katana, son of the late (Āyurvedic) physician, L. Gracianu Fernando. Katana is a township about 36 km to the North of Colombo (Colombo district, Western province).

MS W

Reference no. 16/20-44.

Data given in the microfilm:

Asgiri Vihāraya, Wellawa pansala, Kandy.

no. 17

Size 46 x 6 cms.

Leaves 73.

The Asgiri Vihāraya, seat of one of the two Buddhist chapters in Kandy, is a monastic complex of different Buddhist temples (pansala < Skt. panaśālā) of the ancient Kandyan kingdom. Wellawa pansala is one of them, Wellawa being a village, about 90 km to the northeast of Colombo (Kurunegala district, Northwestern province).

The number of leaves indicated (73) is obviously an error because the MS has 123 folios plus one fly-leaf. The inscribed folios are numbered from ka to je. To judge by the microfilm, each folio measures 26.5 x 4.5 cm. There are 9-10 lines to a folio and each line contains about 75 akṣaras. The handwriting is fairly good, the letters of medium size. A few words at the beginning of the text are obliterated.

Both MSS may be dated to the 19th or early 20th century, considering the nature of writing and language. They represent a single MS tradition, judging by the similarity of the text.

The two MSS fall into the category of works known as sanna or sannayan (plural), sanne or sannaya (singular), word for word translations interspersed with exegetical matter. Generally, a sannaya of a Sanskrit or Pāli verse text takes the words of each strophe in the prose order and then gives the Sinhala meaning of each word. Some words are further explained. When this method of translation is strictly followed, one has only to remove the Sinhala phrases and sentences to obtain the words of each strophe of the

⁸ siddhisāra saṃgraha (saṃhitā). abhāva prāpta el. grāsiyānu pranāndu vaidyācāryyatumāgē put kaṭānē candrā nivasehi padiṃci el. pōl pranāndu mahatā visin parityāga karaṇa ladi.

original in the prose order⁹. However, this is not always the case, as evidenced by the two sanna K and W. Sometimes only the Sinhala translation is given without citing each original word, while sometimes the original word is used without a Sinhala equivalent, so that it is difficult to reconstruct the strophe in full.

The new light thrown on the Si by the Sinhala version will now be examined in respect of the following points: I) the arrangement of chapters and the chapter names, II) the extent of the text, III) the author, IV) some variant readings.

I The arrangement of chapters and the chapter names

The arrangement and names of chapters of MSS K and W, and for the sake of comparison, those of the printed edition, are given in Table 1.

It will be seen from Table 1 that:

- a) On the whole, the contents and the arrangement of chapters of MSS K and W correspond to the printed edition.
- b) The MSS K and W have two additional chapters in relation to the printed edition: anna-pāna-rakṣādhyāya (ch. 4) and upadaṃśa-vṛddhyādhyāya (ch. 20). anna-pāna-rakṣādhyāya is a completely new chapter similar to the one in the Aṣṭāṅgahṛdaya-saṃhitā (ed. Hariśāstrī Parādkar, Varanasi 1982, 124-145) while upadaṃśa and vṛddhi form part of the mūtra-kṛcchrādhyāya (ch. 18) in the printed edition.
- c) That section of the text which contains the chapter ending *iti kṣayarogādhyāyaḥ navamaḥ* (indicated in the table of contents of MS K) is missing in both MSS K and W. The text in both MSS jumps from 8.25a (in the printed edition) to 9.6cd, and continues from there onwards (K 67 v 4-6; W 47 v 6-8).

In MS K the two chapters *rasāyana-vājīkaraṇa* (ch. 30) and *kumārādhyāya* (ch. 31) are transposed.

II The extent of the text

As for the extent of the Si, the number of chapters given in the Sinhala version, a total of thirty-three, is confirmed by the colophon¹⁰ of the two MSS, where the reading can

⁹ An example of this type of sannaya is the Sūrya-śatakaya, ed. Kiriällē Ñāṇavimala, Colombo 1979.

¹⁰ The entire colophon is given below as it will be referred to often. In transcribing the Sinhala text I have used vertical strokes to separate the Sanskrit words culled from the ślokas and the Sinhala meaning which follows them.

iti | mē paridden | dhanva <nta> re | e nämättāhugē | matam | siddhānta | (K siddhāndhānta) | pīkṣya (sic) | balā | āttri ṛṣīhigē | sūnaśya ca | uhu daru vū | ātreyasya ca | ātreyāgē da | āyurvvēda nämäti (K nämämäti) | ārṇṇava | muhudihi (W muhudinhi) | uttīrṇṇe | visiru | cikitsā | piṭiyam nämäti | ambulava | diya binduva | mayā | mā visin.

trayatrimsat | tetis | iha | mehi | ādhyāya | tetis āddhyayekin | nibaddhā | bandanā lada | tantra-paddhatau | khatuhaṭa (K khatabhaṭa) carata < Vāgbhaṭa, Caraka ?> detantrayehi (W detuyehi) | paddhatau | manga (W mangata-) viṣaya koṭa | anuṣṭub-chandetā (W anuṣṭub-chanātā) | anuṣṭupa nämäti chandasin | ślokā | ślokayo | caturddaśa | sataradaśa | tānnvaya | siyuk anūvūvāhu ekdahas siyaka (W -siyakaṭa) yedīmen (W yedīmen ma) | samuddiśya | givisä ravigupta nämäti ädurā visin | imām | mē saṃhitā siddhisāra-saṃhitā tomo | karot | karana lada | iti kalpāddhyāyas triyas trimśatiḥ | siddhisārābhidhāna samāptaḥ.

anena (K ane) punyena tu sarvva-darśanām

be construed as trayo-trimsat $ih\bar{a}dhy\bar{a}y\bar{a}[h]$ 'these thirty-three chapters' as opposed to the reading eka-trimsad ime ' $dhy\bar{a}y\bar{a}[h]$ 'these thirty-one chapters' in the printed edition. The two additional chapters account for the difference.

The folio numbers pertaining to chapters in the two MSS and the corresponding page numbers of the printed edition as reflected in Table 1 indicate the relative length of each chapter. For example, the first chapter takes four folios in MS K (9-13), three folios in MS W (7-10), and four pages in the printed edition (22-26). This provides a basis to assess the extent of each chapter in the original text and to identify any later additions.

The colophon of the Sinhala version also gives the number of ślokas as 1.400 (śloka-caturdaśa-śatānvitaḥ). The figure given in the printed edition is 1.300 (31.37).

This brings us to the question of additional verses indicated by Emmerick in the apparatus to his edition of the Sanskrit text. Twenty-four groups of additional verses occur in the Sinhala version as shown in Table 2. Since the additional verses that are common to several MSS represent a common tradition, the corresponding verses of the Sinhala version may be useful in determining an earlier stage of the textual tradition. It will be seen from Table 2 that most of the verses of the Sinhala version correspond to the verses of MSS A and M.

III The author

As for information with regard to the author, it is significant that the Sinhala version makes no reference to the Tibetan tradition according to which Ravigupta composed the Si having regard to the yellow disease of his elder brother Devagupta. Nor does it refer to Ravigupta's father Durgagupta as a veterinary doctor from the West (Emmerick 1980 p.2 and 1982 p.475).

The Sinhala version at the beginning says that 'this Siddhisāra will be related by Ravigupta, son of Durgagupta'¹². The colophon simply says that 'this Siddhisāra-samhitā was done by the doctor (ädurā < Skt. ācārya) named Ravigupta' (cf. footnote 10).

The unusual silence of the Sinhala version about the Tibetan tradition regarding the author of the Si deserves reflection. Is it due to the difference in the MS tradition, is it

śivam astu sarvva-jagataḥ. tīkṣṇa vū prajñā ättavun kere agra vemvā. siddhir astu. (W adds: śubham astu). K 166 r 1-8, W 122 v 6-9 - 123 r 1-5.

avāpya nirjjitaň ca doṣa-da viṣa (imperfect) jarā-rujā-mṛṭyam ahormi sakulāt (imperfect) samuddhare sambhava-sāgarāj-jāgun [-jagun].

¹¹ Only MS W has been collated with the printed edition. The photocopy of MS K was obtained only in July 1989. My thanks are due to Mr. L. Sugunadasa, Commissioner of Āyurveda (Sri Lanka), and Dr. Upali Pilapitiya, Director, Bandaranaike Memorial Āyurvedic Research Institute, for being kind enough to give me the MS K on loan. I am grateful to the Research group UA 1058 of the CNRS (Paris) for bearing the cost of photocopying that MS.

¹² MS K, the beginning of which is intact, reads:

nama śrī ghaṇāya. sārvam pranamya sarvaṇ durggaguptaśya sūnunā dhīha siddhisāreyaṇ raviguptena vakṣyate. manda-buddhi | manda-buddhi yukta satvayanṭa anugrahayehi pravratta ācāryya ovunṭa upakāra sandahā upanyāśa keļe. sarvam | sarva satvayanṭa hita vū | sarvam | tathāgatayā | praṇamya | vända | durggaguptasya | durggaguptayāgē | sūnunā | putra vū | raviguptena | raviguptayā visin | iha siddhisāram | me siddhisāra nam saṇhitā tomo | vakṣyate | kiyanu läbē. (1 r 1-3).

an error of omission or a deliberate suppression of facts? Does it diminish the trustworthiness of the Tibetan tradition? These problems and other related matters will be examined elsewhere in the light of the data furnished by the Sinhala medical texts.

That Ravigupta was a Buddhist is borne out by internal evidence of the text:

- a) The salutatory formula namah śrī $ghan\bar{a}ya$ in the Sinhala version and namah $sarva-jn\bar{a}ya$ in the printed edition refers to the Buddha.
- b) In the opening śloka homage is paid to the Buddha: sārvaṃ praṇamya sarvajñaṃ. The Sinhala version has sarvaṃ instead of sarvajñaṃ, but the word is translated as Tathāgatayā (i.e. the Buddha).
- c) at the end of the Kumārādhyāya, the Sinhala version gives a mantra in adoration of the Buddha: namo bhagavato bhara...nte te svāha. (K 148 v 3, W 114 r 4, where only ...nte te svāha is legible.) Cf. the mantra in the printed edition: oṃ namo bhagavate garuḍāya namas tryambakāya satya satya tatas tataḥ svāhā (p.142).
- d) The end of the colophon of the Sinhala version, starting with the strophe anena punyena tu sarva-darśanām is likewise of Buddhist inspiration. However, as in the case of the salutatory formula at the beginning, one cannot be sure whether it is attributable to the author or to the scribe. The particular section of the colophon may be translated as follows: 'Because of this merit, may I attain the mastery of all philosophies, overcome the ills of decay, pain and death, be born in a good family, and finally, cross over the ocean of recurrent births. May all beings be happy. May I become foremost among those who are eminently wise. May there be success. May there be prosperity.'

IV Some variant readings

Since a complete list of the variant readings in the Sinhala version will be given in a separate publication, only a few variant readings will be discussed here, especially with reference to the emendations made by Emmerick.

The colophon has an acceptable variant reading, anustub-chandasā (see footnote 10), meaning 'in the Anustubh metre', in which the ślokas of the Si are composed. This metre has four lines $(p\bar{a}da)$ of eight syllables each, which is the case in the Si. Thus, the reading in the Sinhala version is preferable to that of the printed edition: anasta-cchandasā 'unbroken metre'.

With regard to the emendations made by Emmerick, four of them are directly supported by the Sinhala version:

1) bīja*pūrāmbu*-kalkitam (17.14) same in K 101 r 4, W 77 r 2-3.

The Sinhala equivalent given is lapnāranga.

2) dvi-*guṇāntra*-bhavā (18.49) dviguṇāntra-prabhāvā [-prabhavā] K 106 v 4, despite an additional mātrā, reads well. dviguṇānta-prabhāvā W 80 r 7.

The Sinhala version however deviates from the reading in the printed edition by rendering the phrase as $antra-vrddhi^{13}$ 'which has two folds' ($depatak v\bar{u} = dviguna$) and 'which has originated in the intestine' ($antrayehi upan = antra-prabhav\bar{a}$) whereas the

¹³ Pandit Aryadasa Kumarasinghe, Āyurvedic physician of repute in Sri Lanka, translates antra-vṛddhi as hernia: cf. Sārārtha-saṃgraha, Colombo 1987, p.823.

Tibetan version has 'given folds in the intestine' (p. 293). The meaning given to vankṣaṇāsanginī also differs in the two versions: 'attached to the pubic and iliac region' in the Sinhala version but 'to the region of the testicles' in the Tibetan.

- 3) *dhanu-stambhas (21.2-3) dhanusthambha K 113 r 5, W 84 r 8.
- 4) *vābda-pādikam (26.53) vāpda-pādikam W 98 v 8 vā pada-pādikam K 134 v 2.

Both MSS K and W explain sauvīram vāpda-pādikam (or vā pada-pādikam) as satara koṭasak vaṃ mutten ek koṭasak ghaṭā 'mixing four parts with one part of nut grass' (vammutu = abda). If pada is taken in the sense of one part, then the word for abda would be missing. Therefore, it would be better to retain vāpda-, whose form may be due to the interchange of b and p (cf. kepukam for kembukam in 3.21.11, K 17 r 3, W 13 v 2.; anuştup- for anuştub- in the colophon (cf. footnote 10.)

In any case, the Sinhala translation is not clear because it is not specified to what the four parts belong, and it is not explained whether sauvīra means antimony or sour gruel in place of wood-apple juice. The phrase sauvīram vābda-pādikam introduces an alternative formula with the indeclinable $v\bar{a}$. Does it mean four parts of sour gruel with one part of nut grass?

The Tibetan translation is still more complicated.

However, this particular medical formula is reproduced, without the alternative at the end, in a verse in a Sinhala medical treatise dating from about the 13th or 14th century, the *Yogaratnākaraya* (p.70, verse 710)¹⁴:

> gandakayata (1) diyunak rasadiya (2) räge na edeka barata rasandun-käţa (3) kirā ge givulu ämbul heva (4) ambarā (5) tabā ge na ändiri-patala (6) näta gä sanda udäsa na

'Take one part of (1) sulphur (gandhaka), (2) two parts of mercury (rasa), weigh (3) pieces of antimony (rasānjana) equal to the weight of those two, (4) pour wood-apple juice (kapittha-rasa) and (5) grind (all) and keep. When (that) is applied in the morning, there will be no (6) dark film (timira)'.

In both MSS K and W, as well as in the above verse, rasa in dviguna-rasāt is translated as mercury whereas the Tibetan version has 'liquid' (p.375).

Some of the readings in the Sinhala version are better than the emendations based on the variant readings of other MSS:

*rāgoṣṇa-srāva- (25.3)

raktosna-śrava- K 126 v 5, W 93 v 10.

rakta-uṣṇa-srāva- 'blood, warmth, discharge (pus)' contrasts with 'red (*rāga) ... there being warm discharge' in the Tibetan version (p.351). The reading in MSS K and W is confirmed by the following versification of the śloka in the Yogaratnākaraya (p.383, verse 3547):

¹⁴ On the Yogaratnākaraya see my article 'Sinhalese medical MSS in Paris', BEFEO, LXXVI, 1987, 196-198.

lē (1) hā uņusum guṇayen (2) yutuva	da
särava (3) dāha (4) äti nilvan pāya (5)	da
ranvan pähäyen (6) yutu vū vaṇaya	da
pitin upannēyayi (7) dänagan se	da

(1) rakta (blood), (2) uṣṇa (warmth), (3) srāva (pus), (4) dāha (heat or burning sensation), (5) nīla (blue colour), (6) pīta (gold colour), (7) pitta-ja (caused by bile).

2) ghṛta-*pākimāḥ* (3.31.16) ghṛta-pattrimā K 23 r 1, W 17 v 7.

-pattrimā is obviously an error for -paktrimāḥ (Pāṇini IV.4.20 = 'obtained by cooking', Monier-Williams), due to the similarity of -tri- and -ktri- in both Nāgarī and Sinhala scripts. Thus, ghṛta-paktrimāḥ, taken with bhakṣyās in the following verse (3.31.17), gives 'food items cooked in ghee'. In fact, the Sinhala version takes bhakṣyās with ghṛta-paktrimāḥ as well as with taila-kṛta in 3.31.17.

3) dāha-*tṛṣṇādibhir (23.7) dāha-tṛṣṇānvita K 121 v 3, W 90 r 2.

The latter reading accords with the metre and gives precision to the meaning, dropping the word $\bar{a}di$.

Further, for śāntāngārāruṇa-prabhaḥ in b, MSS K and W have śāntāngārāruṇāspadam 'having the spot (āspadam) or base (adhiṣṭhāna) tawny like embers' (śāntāngāra | nivī giya anguru seyin | aruṇāspadam | aruṇu varṇṇa vū adiṣṭāna äti). The Tibetan version has 'the neighbouring region being like embers' (p.333).

The word anvita 'endowed with, having the characteristic of' in the compound $d\bar{a}hatrsinalnet{a}$ is applied in the Sinhala translation to agni-dagdhair iva sphoṭaiḥ as well (agni-dagdhai | ginin dā giya sthānayehi nängi | sphoṭor iva | poḷa seyin anvita vū) '... resembling (literally, having the characteristic of being similar to) a boil which has come up in a spot burnt by fire'. In other words, the erysipelas called agnika is similar to a boil caused by burning. Contrast the Tibetan: 'the pustules being like (things) that have been burnt by fire' (p.333).

Some of the readings of the Sinhala version are identical with or similar to those of all or some of the MSS used by Emmerick:

1) *śūlāntar-granthi-viṇ-mūtra- (1.54) śūlānugrandhitthi- K 8 r 2, W 6 v 4-5.

-dhi seems to be a duplication (cf. siddhāndhānta and nämämäti in colophon, footnote 10). The reading agrees otherwise with that of BCD. tha and dha are sometimes confused as in Gandhavaṃsa for Granthavaṃsa and gandha for grantha (unit of 32 syllables)¹⁵.

The meaning given to the śloka is thus: 'from the indigestion called viṣṭabdha there arise pain in the stomach and the congestion of faeces and urine.' (viṣṭhabda sūcanāt | viṣṭhabda nam ajīrṇṇayen | śūlānugrandhitthi | rujā sahita vū | garbhaň ca viṇ-mūtra-saňgā ca | mala saha mūtra saňga metek veti).

¹⁵ On the second meaning of grantha see my article 'La Jinabodhāvalī de Devarakkhita Jayabāhu Dhammakitti', BEFEO, LXXII, 1983, 74 n. 1.

However, śūlānugranthi-garbhañ ca viņ-mūtra-saṅgā viṣṭabdha-sūcanāt is extremely unmetrical. The metre could be restored by dropping either anugranthi- or garbhañ ca. In the first instance, the reading would be śūlaṃ garbhañ ca (or śūla-garbhañ ca) viṇ-mūtra-saṅgā viṣṭabdha-sūcanāt. Since 'pain in the stomach', found in the Tibetan, too, is clearly indicated by garbhañ ca preceded by the Sinhala phrase rujā sahita vū, śūlaṃ garbhaṃ may be retained. Could it be that anugranthi was used by the translator to explain śūla-garbha?

2) **svedāsya-kaṭutā-* (5.4)

madāsya-kaṭutā- K 32 v 8, W 23 v 9, agreeing with ABCDM.

mada is rendered as unmatta bavu (insanity), which, taken with the following bhrama (giddiness) and pralāpa (incoherent speech) indicates a state of delirium, not incompatible with fever (due to bile).

3) *mṛdvī- (18.47-48)

vrddhi K 106 v 3, W 80 r 6, agreeing with CDM.

The Sinhala version treats $v_r ddhi$ as a noun in the nominative case (the disease itself) and not as an adjective ($medas\bar{a} \mid medasin upan v_r ddhi tomo \mid mahat\bar{\iota} \mid mahat v\bar{e}$). 'The scrotal enlargement arisen due to fat is voluminous', instead of 'As for that which has arisen in (connection with) the disease of increased fat ($medas\bar{a}$), it is large ($mahat\bar{\iota}$) and soft ($m_r dv\bar{\iota}$)' in the Tibetan version (p.293).

4) *gala-grahāḥ (19.2) mala-vibandha K 107 v 3, W 80 v 9.

-vibandha does not suit the metre but -grahāh, as in ACD, does. The Sinhala version does not explain the word, whose meaning is constipation. Since Caraka says that the 'six types of udāvarta (upward movement of vayu) are those caused by (suppression of natural urges of) flatus, urine, faeces, semen, vomiting and sneezing' constipation seems to be more apt in the context than a 'throat disease' (Emmerick 1982, p.297).

5) *gada*-kvāthena (26.69) gandha-kvāthena K 136 r 8, W 99 v 7, agreeing with ABCD.

MS W explains gandha-kvāthena as 'the decoction made by boiling the elādi-gaṇa' (gandha-kvāthe | elādi gaṇayen sun | kvāthena | kaṣāyen). MS K reads: gandha-kvāthe | mādi (?) gaṇayen sun | kvāthena | kaṣāyen. The reading in MS W is supported by the following verse, again in the Yogaratnākaraya (p.79, verse 782), which is almost a translation of 26.69:

elādī gaṇayen siňdi kasāya (1)
välmī (2) kaveļu (3) masvännat (4) yahavapu
lamin kalka ūranmas da tel siň
da (6)
lūvot kaṇehi kan nādē (7) nasā (8) se

(1) gandha-kvātha, (2) yaṣṭi, (3) kākolī, (4) māṣa, (5) (= śatapuṣpa), kotamburu da, instead of yahavapu da, would exactly correspond to the Sanskrit text (kustumburu = dhānyaka), (6) sūkarasya vasā pakvā, (7) karṇa-nāda, (8) nāśanī.

¹⁶ Caraka-samhitā, ed. P.V. Sharma, vol. 1, Varanasi-Delhi 1981, p.134.

gandha, as explained by Balawant Singh and K.C. Chunekar¹⁷, is a group name of aromatic drugs usually included in the elādi-gaṇa. sprukkā in the elādi-gaṇa is explained by commentators as gandha-viśeṣa and sugandhita-dravya¹⁸.

6) nayana-*budbudam vadet* (26.2) nayanena [nayane] bhūtavat vidhi K 129 r 9, W 95 r 10, similar to C.

The Sinhala version (nayanena | nayanayehi | bhūtavat vidhi | äs äti vidhi vē, bhūtayan keleyi) may be literally rendered as 'the creation (vidhi) of the eye is endowed with the elements (bhūtavat).' This accords with palaṃ bhuvo 'gnito raktaṃ vātāt kṛṣṇaṃ sitaṃ jalāt | ākāśād aśrumārgāś ca jāyante netra-budbude | | (Suśruta-saṃhitā, pt. 2, ed. Ambikādatta Śāstrī, Varanasi 1985, p.5, verse 11). [In the eyeball, the flesh is born of earth, the red (part = blood) is born of fire, the black (part = iris and pupil) is born of wind, the white (part = cornea) is born of water, and the lachrymal duct is born of ether.]

Further, in 26.2a, the Sinhala version has $p\bar{\imath}ta(m)$ 'yellow' for pindam 'ball' in the Tibetan. $p\bar{\imath}ta$ goes with the following rakta-sitasitam 'red, white and black', colours of the eye.

Cf. the Tibetan version: '... as for the nature (bhūtatā) of the eye (nayana), it is (characterised by) being a ball (piṇḍaṃ), red (rakta-), white (sita-), and black (asitam)' (p.361). piṇḍaṃ and budbudaṃ, both meaning eyeball, are redundant.

7) *añjana*-kṣīra-saṃyukto (31.34) ajakṣīreṇa saṃyukta K 165 v 7, W 122 v 2-3, agreeing with BC.

Goat milk is here prescribed as an admixture (prativāpa) to the medical preparation given at 31.33. The emendation añjana (barberry extract) and kṣīra (milk) leaves the latter item vague whereas milk is often specified in Āyurvedic prescriptions as cow milk, goat milk or mother milk. For instance, in the single chapter on eye-diseases, the Siddhayoga (ed. Hanmanta Śāstrī Pādhye, Poona 1894) mentions ajā-kṣīreṇa piṣṭaṃ syād (61.18), chāga-kṣīreṇa peṣayet (61.129), stanyodakārdhaṃ kartavyaṃ (61.62, commentary: strī-kṣīra-jalayor militayoḥ), and gavya-kṣīrotthitaṃ sarpis (61.69). These are three of the eight kinds of milk whose properties are analysed in classical Āyurvedic texts, the other five being the milk of camels, ewes, she-buffaloes, mares and she-elephants (cf. Suśruta-saṃhitā, Sū.45).

The above discussion of variant readings amply justifies Emmerick's remark that 'the edition of the whole of the original Sanskrit text of the Siddhasāra is ... necessarily a lengthy task ...: the script is difficult, the MSS are corrupt, and the subject matter sometimes obscure' 19. In spite of those difficulties he has produced an exemplary edition of the Sanskrit text, based on the MSS available to him in the '70s. It will be seen that the recently discovered Sinhala version is helpful, as shown above, in clarifying certain obscure points of the original text, which we now possess, thanks to Emmerick.

¹⁷ Glossary of vegetable drugs in the Bṛhattrayī, Varanasi 1972, p.136.

¹⁸ Aşţānga-sangraha, ed. Yādavajī Trikamajī Ācārya, Varanasi 1945, p.162; Suśruta-saṃhitā, ed. id., Bombay 1938, p.166 (24.25).

¹⁹ Emmerick 1971 p.93.

Table 1

Concordance of chapters in MSS K and W and the printed edition, in the same order

The orthographical errors in the two MSS are not corrected in the following transcription.

(1) (1) [1]	 iti tantrāyayo prāthamaḥ (K 9 r 7) chapter ending not given (W 7 v 3) iti tantrādhyāyaḥ prathamaḥ samāptaḥ (p.22)
(2) (2) [2]	 iti va dravya-gaṇādhyāya dvitīyaḥ (K 13 r 8) iti dravya-gaṇādhyāyaḥ dvitīyaḥ (W 10 v 3) iti dravya-gaṇādhyāyo dvitīyaḥ samāptaḥ (p.26)
(3) (3) [3]	 ity anna-pāna-vidhis tritīyo dhyāya (K 24 r 2-3) ity anna-pāna-vidhis tritīyo dhyāyä (W 18 v 3) ity anna-pāna-vidhis trtīyo 'dhyāyaḥ (p.37)
(4) (4) []	 ity anna-pāna-rakṣādhyāyaś caturttha (K 27 r 1) ity anna-pāna-rakṣādhyāyaś caturttha (W 20 v 1) not extant
(5) (5) [4]	 iti rişthādhyāyaḥ paňcamaḥ (K 32 r 5) iti rişthādhyāya paňcama (W 23 v 2) ity ariştādhyāyaś caturthaḥ samāptaḥ (p.40)
(6) (6) [5]	 iti jvarādhyāyaḥ şaṣṭhamaḥ (K 50 r 2) iti jvarādhyāṣagaṣaṣṭhamaḥ (sic) (W 35 v 1) iti jvara-cikitsādhyāyaḥ pañcamaḥ (p.54)
(7) (7) [6]	 ity atīsārādhyaya saptamaḥ (K 59 v 2) ity atīsārāddhayaḥ saptamaḥ (W 41 v 9) ity atīsārādhyāyaḥ şaṣṭhaḥ (p.61)
(8) (8) [7]	- iti rakta-pittāddhyāyo şṭhamaḥ (K 64 r 8) - iti rakta-pittāddhyāyo ṣṭhamaḥ (W 45 r 2) - iti rakta-pittādhyāyaḥ saptamaḥ (p.65)
(9) (9) [8]	- lacuna from 8.25 to 9.7 (K 67 v 4) - same (W 47 v 6) - iti yakşmādhyāyo 'şṭamaḥ (p.68)
(10) (10) [9]	 iti gulmādhyāyo daśama (K 71 v 2-3) iti gulmādhyāyo daśamä (W 51 r 3) iti gulmādhyāyo navamaḥ samāptaḥ (p.72)
(11) (11) [10]	 ity udarādhyāya ēkādaśamah (K 76 r 2) ity udarādhyāya ēkādaśamah (W 55 r 3) ity udarādhyāyo daśamah (p.76)

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80
         - iti pramehāddhyāyo dvādaśama (K 78 v 2)
(12)
         - iti pramehāddhyāyo dvādaśama (W 57 v 1)
(12)
[11]
         - iti pramehādhyāya ekādaśamaḥ samāptaḥ (p.78)
         - iti kuşthādhyāyas trayodaśama (K 86 r 4)
(13)
         - iti kuşthādhyāyas trayodaśama (W 63 r 7-8)
(13)
[12]
         - iti kuşthādhyāyo dvādaśamaḥ (p.84)
         - ity arśo-bhagandarādhyāyaś caturddaśamah (K 92 v 4)
(14)
         - ity arśo-bhagandarādhyāyaś caturddaśama (W 69 r 9-10)
(14)
[13]
         - ity arśo-bhagandarādhyāyas trayodaśamaḥ (p.91)
         - iti kāmilā-pāňdu-rogāddhyāya paňcadaśamah (K 95 r 9)
(15)
(15)
         - iti kāmilā-pāňdu-rogāddhyāya paňcadaśama (W 72 r 1)
[14]
         - iti pāṇḍu-roga-kāmalādhyāyaś caturdaśamaḥ (p.94)
         - iti hikkā-śvāsādhyāyaş şodaśama (K 98 r 5)
(16)
         - iti hikkā-śvāsādhyāyaş şoḍaşama (W 74 r 9)
(16)
         - iti hikkā-śvāsādhyāyah pañcadaśamah (p.96)
[15]
(17)
         - iti kāsādhyāya saptadaśama (K 99 v 7)
         - iti kāsādhyāya saptadaśama (W 75 v 7)
(17)
         - iti kāsādhyāyah sodasamah (p.98)
[16]
         - iti charddi-trişṇādhyā stodaśamaḥ (K 102 r 8)
(18)
(18)
         - iti charddi-trişṇādhyāyo stādasamaḥ (W 78 r 1)
         - iti chardi-tṛṣṇādhyāyaḥ saptadaśamaḥ (p.100)
[17]
(19)
         - iti mūtra-kricchādhyāyah ūna-vimsatih (K 104 v 6)
(19)
         - iti mūtra-kricchādhyāya ūņa-viṃsatiṃ (W 79 r 3)
         - iti mūtra-krcchrādhyāyo 'stādaśamaḥ (p.103)
[18]
(20)
         - ityu upadamśa-vrddhādhyayo vimśati (K 107 r 8)
         - ity ūpadamsa-vrddhāddhyāyo vimsati (W 80 v 6)
(20)
         - iti mūtra-krcchrādhyāyo 'stādasamaḥ (p.103)
[18]
(21)
         - ityu udāvartti-śūla-hrdrogāddhyāyam eka-vimsati (K 110 r 8 - 110 v 1)
         - ity udāvartta-śula-hrdrogāddhyāya eka-vimsati (W 82 v 4)
(21)
         - ity udāvartādhyāya ūna-vimsatimah (p.106)
[19]
(22)
         - iti unmāda-apasmārāddhyāyo dvā-vimsati (K 113 r 2)
(22)
         - ity unmādā-apasmārāddhyāyo dvā-vimsati (W 84 r 6)
         - ity unmādāpasmārādhyāyo vimsatimah (p.108)
[20]
         - iti vāta-vyādhi-cikitsādhyāyaḥ trayo-vimsatiḥ (K 118 v 6)
(23)
(23)
         - iti vāta-vyādhi-cikitsādhyāyas triyoda-vimsatih (W 88 r 3-4)
         - iti vāta-vyādhi-vāta-rakta-cikitsādhyāya eka-vimsatimah (p.112)
[21]
         - iti pānātyādhyāyaś caturvvimsáatitamah (K 120 v 8)
(24)
         - iti pānātyādhyāyaś caturvvimsatitama (W 89 v 3)
(24)
         - iti madātyayādhyāyo dvāviņsatimah (p.114)
[22]
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- iti visarppādhyāya paňcavimsáati (K 123 r 3) (25)
- (25)- iti visarppāddhyāyah paňcavimsáti (W 91 r 5)
- [23] - iti visarpādhyāyas trayoviņsatimah (p.116)

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- iti śophāddhyāya stavimśatih (K 126 v 2)
(26)
         - iti śophāddhyāya sstavimsatih (W 93 v 7)
(26)
[24]
         - iti śophādhyāyaś caturviṃśatimaḥ (p.119)
        - iti vraņādhyāya sapta-vimssati (K 129 r 5)
(27)
         - iti vranādhyāya sapta-vimsatih (W 95 r 7)
(27)
[25]
         - iti vranādhyāyah pañca-viņsatimah (p.122)
(28)
        - iti śālākyāddhyāyo stavimsati (K 142 r 3)
(28)
         - iti śālākyāddhyāyo stavimsati (W 103 v 6)
[26]
         - iti śālākyādhyāyaḥ şaḍ-viṃśatimaḥ (p.132)
(29)
         - iti vişāddhyāya ekānnatrimsatitamah (K 147 r 9-10)
(29)
         - iti vişāddhyāya ekānnatrimsatitamah (W 107 v 5)
         - iti vişādhyāyah sapta-vimsatimah (p.136)
[27]
(30)
         - iti rasāyana-vyājīkaraņāddhyāyas trimsáaptamah (K 150 v 2)
(30)
         - iti rasāyana-vyājīkaraņādhyāyas trimsattamah (W 109 v 5)
[28]
         - iti rasāyana-vājīkaraņādhyāyo 'sta-vimsatimah (p.138)
(31)
         - iti kumārādhyāya eka-trimšatitama (K 148 v 4)
(31)
         - iti kumārādhyāya eka-trimsatitamah (W 114 r 4)
         - iti kumāra-tantrādhyāya ekona-trimsatimah (p.142)
[29]
(32)
         - iti paňcakarmmāddhyāyo dvā-timsáti (K 162 r 7)
         - iti paňcakarmmāddhyāyo dvā-timsáti (W 119 v 5)
(32)
[30]
         - iti pañcakarmādhyāyas trimsátimah (p.146)
         - iti kalpādhyāyas triyas trimsatih (K 166 r 6-7)
(33)
(33)
         - iti kalpādhyāyas triyas trimsatih (W 123 r 2)
[31]
         - iti kalpādhyāya eka-trimsatimah (p.148)
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Table 2

Additional verses in the Siddhasāra edition occurring in the text of the Sinhala version

Folio numbers at the end of lines refer to MS W. Where additional verses are not cited by Emmerick, the relevant reading in MS W is given below uncorrected. Extra additional verses are indicated with a plus sign added to the number of such verses.

Anna-pāna-vidhi				
3.17+	BCDM W	2 vv.	11 r 7-8	
3.20.17 ÷	ABCDM W	2 vv.	12 r 6-7	
	BC W	12+ vv.	12 r 7-9 - 12 v 1-6	
3.21.4+	BC W	4 vv.	13 r 2-4	
3.22.2+	BC	7 vv.		
	W	3-4; 6-7	13 v 4-8	
3.22.3+	BCM W	5 vv.	13 v 7-8 - 14 r 1-2	
3.25.10+	BC	12 vv.		
	A	4-8		
	DM W	1-8	15 r 3-9	

Jvara

5.81+	BCD	2 vv.	
	M	5 vv.	
	W	2-5	28 v 8-9 - 29 r 1-2
5.130+	M	8 vv.	
	W	2 vv.	33 v 10 - 34 r 1-3 (1)

(1) śubhā | sudu vū | abhrasaṃkā | valā väni vū | śaśāṃkaras | tā rasin | śītalo | sihil vū | harmme | saňdaļuyehi ho | malaye udaka | sanun diyen | sikte | isnā vū | harmmayehi ho | pitta-jvara-nara | pitta-jvara ättā | yā sthāpya | honeyi (cf. Siddhayoga, p.33, verse 103; Yogaratnākaraya, pp.151f., verses 1395-1396). cāvyaňgya | sarup vū deha äti | śītalaṃ | sihil vū | tana | kṛśa vū | mani | miniyen | muktā | mutten | vibhūṣita | sädunā vū | śasi | kapure | kesya | nā kesuru un digdha vū | aňga | deha äti | nava yauvana | abhinava vayas äti | ślesmamlā | ślesma prakṛti vū | vakuļu | muhuļuhuge | āmoda-gandha | sudaganin (sic) | āḍhya | pradhāna vū | kundāsṛkdāma | kodamal kaḍin | vibhūṣita | sädunu vū | striya | mese vū strīhi | sparśamātrena | āliňgana mātrayen | ucchitam dāham | adhika vū dāhaya | jayesu | dannāhuyi.

84 r 1-2 (2)

Kuştha

* *			
12.5+	ABC W	6 vv. 1-4	58 v 2-9
12.11+	ABCD W	18 vv.	59 v 5-9 - 60 v 1-3
Arśo-bhagana	dara		
13.35.2+ 13.35.4+ 13.50+	M W ABCEM ABCDEM ABCDE ABCDEM W	4 vv. 1-2 3-12 13-14 15-28 3-4, 7-13 15-23 25-28 4 vv.	66 v 9 - 67 r 1-3 67 r 3-9 67 v 2-10 68 r 1-4
	A BC W	6+ vv. 6+ vv. 1-2	69 r 6-7
Pāṇḍu-roga-k	cāmalā		
14.20+	ABCM W	2 vv.	71 v 1-3
Unmādāpasmāra			
20.21+	ВС	8 vv.	

1 v.

W

(2) śodaśāmśai | śolos bhāgayak vū | kuṣmānḍaka-rase | pusul kakāla rasayehi | yaṣṭikam | välmī sahita koṭa | siddham ghṛtam | siddha kala ghṛtaya | apasmāram | apasmāraya | jayati | denēyi | nāmnā | namin | siddhākhyān nāmā | siddha ghṛta nam vē.

Śopha

Śālākya

26.15+ ABCE W 2 vv. 95 v 11 - 96 r 1 (3)

(3) In the Sinhala version, these verses occur after 26.14.

(4) tāla | sanjana nam baḍa | nālikerasya | puļup baḍa hā | tathai va | esē ma | aruskaraṣya | arukṣarayāge (sic) da | vamśasya | vamśayāge da | karīra | kiļila yana metekin | dagdhvā | davā | kṣāram | kṣāraya | parisṛtam | parahā gat garadiya | karabha | gadrabhayangē | aṣṭhimaya | äṭin upan | cūrṇṇam | sunna | kṣāreṇa | koṭa tubu garadiya | paribhāvitam | bhavanu ladde kaḍin bäda dora eva tabā davaval viyalanu | daśakṛt | dasa davasak hō | aṣṭakṛtvā | aṭadavasak hō bhāvita vū | sūkṣmam cūrṇṇan tu | manā koṭa cūrṇṇaya | kārayet | karanu.

etat | mē mala äti äsa aňdane | śukle | suda äsa malhi | asādhesu | no sahiya häkkehi | kṛṣṇa karaṇam | mala kaļu kirīmet me sunna | param | uttamayi.

yāni | savrana avrarana [avraṇa] yam | śuklāni | śukla kenek | rasādhyāni (sic) | asādhyayo da | teṣam | ovunṭa | aňjanam | aňduna | param | uttamayi (cf. Siddhayoga, p.464, verses 98-100; Yogaratnākaraya, p.68, verses 694-696).

(5) kuṃkuma | kokum | agarū | kaļuväl devudurū hō | karppūra | kapuru | kuṣṭa | upul koļa | eļā | elbiju | patra | kamalvat | kesarai | nava nämbiliyä yana metekin | vaktra | tuvaralā | bräha (sic) candanā | heļa sadun | tulyāśai | sama koṭa ehi mē häma be...

cūrṇṇāňjanā | sunu adun | idam | me | śreṣṭam | uttamayi | narāṇām | minisun äsa | timirāpaham | timira nasā | sarvva | häma | netramaya | äsavan roga | apaham | nasā | vaśīkarmṇām (sic) uttamam | uttama vū viśi aṭa kāranāyi (cf. Yogaratnākaraya, p. 73, verses 737-739).

(6) rasāňjanam | rasa aňdun | vilaňgāni | valaňgasāl | tuttha | ridī tutu | madhuka | välmi | nisē | vanuväl kasā deka | triphalā | tipal | vyosa | tikuļu | sindhurtta | saindhava | pauňḍarī | poḍaru vaṃ mutu ho | ājyena payasā | eļu kirin | piṣṭvā | vaṭā | vartti | gulikāc chāyā | sevanä lā viyalanu netra rōga harī | nāňgāvyena | nāňgārjju namti | bhikṣunā | bhikṣūhu visin | ākhyatā | kiyana lada gulikāyi.

This is a variant of the medical formula (Nāgārjuna-varti), which is said to have been engraved in a stele in Pāṭaliputra by Nāgārjuna as a remedy for *timira*. It is interesting to note that Nāgārjuna is here referred to as a *bhikṣu*, a Buddhist monk. For the formula, cf. *Siddhayoga*, pp.470-471, verses 148-152; Cakrapāṇidatta, *Cikitsāsāra-saṅgraha*, ed. Jīvānanda Vidyāsāgara, Calcutta 1933, pp.679-680, verses 125-129; *Yogaratnākaraya*, p. 73, verses 741-744.

26.98+ A 14 vv.

W 2 vv. 101 r 7-9 - 101 v 1 (7)

(7) In the Sinhala version, the additional verses occur after 26.96:

dvau-kṣārau | suvasa-yavakara deka | triphalā | tipal | vyoṣa | tikuļu | viḷanga | vaḷangasāl | lavaṇāś-rikam | saindhava | anśakā | samabhāga vet | citakaśceti (sic) | ratniṭul yana metekin | cūrṇṇāni | sunu | go-mūtreṇa | gomuyen | lehavat pacet | pisanu bol koṭa pisanneyayi seyi.

esā go-mūtrikā | gomūya kaļā vū | vartti | gulikāva | kantha-roga nāśanī | nasā | śastra | śatin | sāddhyana pi | sāddhya da vū vyādhi | nihanti | nasayi (cf. Astāngahrdaya, ed. Hariśāstrī Parādkar, Varanasi 1982, p.857, verse 101; Sārasaṃkṣepa, ed. Aryadasa Kumarasinghe, Nugegoda 1984, p.572, verse 14).

26.123+ BC W 6 vv. 103 v 1-4 (8)

(8) sanu-paya | huk-kiri | arkkasya-paya | varaha kiri | langulī | liyanangalā ala | mārkkadva | kihikindiriya | viṣamaham | hattana | ajāmṛta | eļu mūtra mī sahita koṭa | sendavāruni | kehemändi sahita | raktikā | väl peṇela.

siddhārttha | siddhatu tel | aiļu | yatin lahalu huyāgatte (?) | tīkṣatailam garbha nātvā (sic) | mekī huhādi behet gaba koṭa da (sic) śuddhāmbu tailaya | vipaścitā | nuvaṇättāhu visin | vahninā | noho e | mṛdunā | moļok koṭa davā | pakvam | pisana lada | tailam | talatela | pālityam | ekaļulu bava | nāśanam | nasā.

kūrmma-priṣṭa | iduppiṭi | samāno pi | samāna dī kaļul tomo | bhavet | veyi | roma taṣkapi tema sorāgannā laddi paļamu | anena vidhinā | me tel | digdhā | galvanu | romasā | keheyen | ṛkṣasākhī va | valas päṭiyaka me [men] | jāyate | upadi (cf. Yogaratnākaraya, p.61, verses 639-640).

Pañca-karman

30.18+ BC W 4 vv. 115 v 6-8 (9)

(9) dantī | dätta ala | śaṃkhinī | niraṣyaṅgiṇiya säkapiyā ho | brahmī | dämitiriya | triphalā | tipal | vyādhighātānām | erahäňda yana metek denā | sammitāna | sambandhavūvavun | cūrṇṇitān | sunu karaṇa laddāvun | puṣpeṣa | sapu mahanel malhi | vikiret | me sunu isalā | tat | ē | ghrātvā | himbä tat mātrāyen | virecyeta | vireka vanne tannaru (?) (cf. Yogaratnākaraya, p.430, verses 3971-3972).

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Emmerick 1980 = R.E. Emmerick, *The Siddhasāra of Ravigupta*, vol.1: The Sanskrit text, (Verzeichnis der orientalischen Handschriften in Deutschland, ed. W. Voigt, Supplementband 23.1), F. Steiner Verlag, Wiesbaden 1980.

Emmerick 1982 = R.E. Emmerick, The Siddhasāra of Ravigupta, vol.2: The Tibetan version with facing English translation, (Verzeichnis der orientalischen Handschriften in Deutschland, ed. W. Voigt, Supplementband 23.2), F. Steiner Verlag,

Wiesbaden 1982.

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Sanskrit Äyurvedic Manuscripts in the British Isles

DOMINIK WUJASTYK

It has been said that 'of the whole collating project, the hardest part to carry out with complete success is probably the business of finding out what manuscripts there are.' This remark, originally intended to apply to classical Latin and Greek works, is even more true for Sanskrit manuscripts, which exist in such relative abundance.

There are more Sanskrit manuscripts in Britain than in any other country outside India. A rough estimate puts the number at about 30,000, only half of which have been catalogued. Clearly there are great resources in that country for the study of all aspects of Sanskrit culture, and Āyurveda is no exception. It may be of value, therefore, to give a survey of the Sanskrit collections in Britain, with reference to Āyurveda, and to give some indication of the Āyurvedic works in the uncatalogued collections.

The five most important collections in Britain, from the point of view of size, are those of the India Office Library and Records in London, the Bodleian Library in Oxford, the Wellcome Institute for the History of Medicine in London, the Cambridge University Library, and the British Library in London. The catalogues of these collections, where they exist, are listed by Janert² as numbers 164, 166, 238, 240, 244, 157 and 159, and most of them have sections describing āyurvedic manuscripts. Each of these repositories also has the following uncatalogued collections.

The India Office Library and Records, London

There are two collections not described in the catalogues referred to above: the Stein Collection and the Hoernle Collection. The former consists of those manuscripts in the Brāhmī script brought back from Stein's three archaeological expeditions to Central Asia in 1900-1, 1906-8 and 1913-16. Many of these are listed and described in Stein's scientific accounts of his expeditions, especially in the description of the finds of the Khadalik site during the second expedition. These manuscripts consist largely, but not exclusively, of Mahāyāna Buddhist items.

The Hoernle Collection consists of the Central Asian manuscripts sent to Hoernle, as government palaeographer, between 1895 and about 1900. A description of them was

¹ M.L. West, Textual Criticism and Editorial Technique (Stuttgart: Teubner, 1973), p.64.

² Klaus Ludwig Janert, An Annotated Bibliography of the Catalogues of Indian Manuscripts, Part 1 (Wiesbaden: Franz Steiner, 1965). Not in Janert are the handlists of Losty and Wujastyk (see notes 12 and 17), that by Gambier-Parry and Johnston, and that of V. Raghavan.

³ Mark Aurel Stein, Serindia: a Detailed Report of Explorations on Central Asia ... (Oxford: Clarendon press, 1921). See also the scientific reports of Stein's first and third journeys: Ancient Khotan: a Detailed Report on Archaeological Explorations in Chinese Turkestan ... (Oxford: Clarendon press, 1907) and Innermost Asia: Detailed Report of Explorations in Central Asia ... (Oxford: Clarendon press, 1928).

⁴ Prof. D. Pingree informs me that there are also a few Sanskrit MSS in the I.O. acquired after Keith by gift, and that there is a handwritten list of these.

published by Hoernle in 1901.⁵ The Sanskrit manuscripts in this collection are all fragmentary; several were edited and published by Hoernle in 1916.⁶ These manuscripts are primarily Buddhist in subject matter. A general survey of the collections of the India Office, catalogued and uncatalogued, was given by Sutton in 1952.⁷ A new guide to the combined collections of the India office and the British Library is in the course of preparation.

A few Sanskrit manuscripts are to be found amongst the items left behind in the India Office by Sir George Grierson. These are described by Randle⁸, but apparently include no āyurvedic manuscripts.

The Bodleian Library, Oxford

In spite of the fact that Oxford's early Sanskrit and Prākrit collections received the expert attentions of Aufrecht, Keith and Gambier-Parry, the largest single uncatalogued collection in Britain is probably the Chandra Shum Shere collection in the Bodleian Library, (although this situation is being remedied). This collection of over six and a half thousand manuscripts was purchased from an anonymous Benares pandit, and donated to the British Government in 1909 by Sir Chandra Shum Shere, the then Prime Minister of Nepal. A project has started to catalogue this large collection, and the first volume, by David Pingree, describing *jyotişa* works, appeared in 1984. Full details of the provenance and character of this collection are given in the preface and introduction to this catalogue. There are about one hundred and sixty āyurvedic manuscripts in the Chandra Shum Shere collection and a list of them is given in appendix I below.

The University Library, Cambridge

In 1883 Cecil Bendall published a catalogue of the 248 Buddhist Sanskrit manuscripts in the Cambridge University library. However, just under one thousand manuscripts on other subjects remain uncatalogued at the time of writing. These are chiefly palm leaf manuscripts from Nepal, acquired between 1873 and 1876 by Dr. Daniel Wright, who was surgeon to the British residency in Kathmandu. Many are very old indeed, and contain unusual and important recensions of works. A list of the medical works from this collection is given in appendix II below. A list of about 500 Nāgarī manuscripts acquired

⁵ A.F. Rudolf Hoernle, A Report on the British Collection of Antiquities from Central Asia, published as an extra number to the Journal of the Asiatic Society of Bengal in 1901, section III, part II.

⁶ Ibid., Manuscript Remains of Buddhist Literature Found in Eastern Turkestan ... (Oxford: Clarendon Press, 1916).

⁷ S.C. Sutton, A Guide to the India Office Library (London: H.M.S.O., 1952).

⁸ H.N. Randle, Bulletin of the School of Oriental and African Studies 10 (1940-42), p.1066.

⁹ David Pingree, Jyotiḥśāstra, part I of A Descriptive Catalogue of the Sanskrit and Other Indian Manuscripts of the Chandra Shum Shere Collection in the Bodleian Library edited by Jonathan Katz (Oxford: Clarendon Press, 1984).

by Bendall in Benares, Bombay and Rajasthan is printed in his account of his tour in 1884-1885, but it contains few medical texts.¹⁰

The British Library, London

In 1902, 19 years after publishing his Cambridge catalogue, Cecil Bendall published a catalogue of the Sanskrit manuscripts in the British Library, describing the manuscripts acquired up to 1898, but omitting Jaina materials. No further catalogues have been published since. However, in 1971 Mr. Jeremiah Losty, Assistant Keeper in the Department of Oriental Manuscripts and Printed Books in the British Library, produced a typescript list of the uncatalogued manuscripts in the collection. There are 55 manuscripts on medicine in this list, all but two coming from the Neville collection of manuscripts from Ceylon. The Neville collection, which was acquired by the British Museum in 1904, consists mostly of Sinhalese and Pāli works, but also contains 138 Sanskrit and Sinhalese works (sanna: Sinhalese translations of Sanskrit works). The two manuscripts not from the Neville collection are Or.8150 and Or.8152, which are both from Western India. A title-list of these medical works, taken directly from Mr. Losty's list, is given below in appendix III. The present author is not a specialist in Sinhalese, and it is to be hoped that this list will be corrected and supplemented by a more knowledgeable scholar.

It is to be noted that some years ago the India Office Library became administratively part of the British Library. The British Library's Department of Oriental Manuscripts and Printed Books has recently moved into the India Office building, Orbit House. This provides convenient access to both collections at a single site. In the future, the two collections may move to the new British Library site in Euston Road, London. The Wellcome Institute is also in Euston Road, and the combined Sanskrit manuscript collections of these institutions will be unparalleled outside India.

¹⁰ Cecil Bendall, A Journey of Literary and Archaeological Research in Nepal and Northern India During the Winter of 1884-5, Cambridge: Cambridge University Press, 1886.

¹¹ A useful survey of the library's catalogues is F.C. Francis, *The Catalogues of the Oriental Printed Books and Manuscripts* (London: Trustees of the British Museum, 1959), a revised and enlarged edition of the article offprinted from *The Journal of Documentation* 7.3 (1951). Several lists of MS acquisitions are published in the *British Museum Quarterly* and the *British Library Journal*.

¹² J.P. Losty (compiler), A Catalogue of Sanskrit and Prakrit Manuscripts in the British Museum, vol. II ([London, 1971]).

¹³ My thanks to Jinadasa Liyanaratne for several corrections to this list (he also informs me that there are further Sri Lankan medical manuscripts in the British Library collection that do not appear in J. Losty's list); any remaining errors are mine alone. Other (non-medical) items of importance in Mr. Losty's list include several early illustrated palm leaf manuscripts from Nepal, two 18th century palm leaf manuscripts in Malayalam script of Bhāsa's Pratimānāṭaka and Abhiṣekanāṭaka, some Gilgit manuscripts, and the Stein fragments from central Asia. The British Library acquires new Sanskrit manuscripts regularly.

The Wellcome Institute for the History of Medicine, London

The Wellcome collection of Sanskrit and Prakrit Manuscripts received special mention in the Government of India's Report of the Sanskrit Commission 1956-195714 as an important collection for the study of Ayurveda. The collection was largely made between 1911 and 1921 by Dr. Paira Mall who was employed by Sir Henry Wellcome. Sir Henry was a self-made millionaire and founder of an international pharmaceutical company. is He hired Mall in 1911 to collect Sanskrit and other manuscripts of relevance to the history of medicine in South Asia. Further acquisitions continued to be made, on a smaller scale, for another twenty years. During Sir Henry's lifetime the collection was effectively private, but today the Wellcome Institute for the History of Medicine is an international centre for the history of medicine, and actively seeks to promote the use of its oriental collections for historical research. A booklet by the present author describes the Institute's South Asian collections in a general way and those interested are referred to this for more details. 16 The Sanskrit and Prākrit collections are only partly catalogued. They comprise approximately 6000 or more manuscripts, about three quarters of which have been listed. The collection covers all branches of Sanskrit literature. A handlist of the collection has commenced publication, and volume one describes 1003 manuscripts, of which 249 are medical works.¹⁷ There are also works in the related fields of the astral sciences, tantra, yoga, etc.

Other libraries

A small number of uncatalogued Sanskrit manuscripts is to be found scattered in various libraries around Great Britain and Ireland. The largest groups are in the School of Oriental and African Studies, London (97 Sanskrit, 158 Pāli, 1 Prakrit), 18 the John Rylands University of Manchester Library (29 Sanskrit, 83 Pali), 19 Edinburgh University Library (31 Sanskrit, 11 Pali) and Queen's University of Belfast (59 Sanskrit). These and other smaller collections remain to be examined. More details are given in J. D.

¹⁴ Government of India, Report of the Sanskrit Commission 1956-57 (Delhi: Manager of Publications, 1958), p.216.

¹⁵ See Helen Turner, Henry Wellcome: the Man, His Collection and His Legacy (London: Wellcome Trust and Heinemann, 1980).

Dominik Wujastyk, The South Asian Collections of the Wellcome Institute for the History of Medicine (London: The Wellcome Institute, 1984, 1988). See also Nigel Allan, The Oriental Collections of the Wellcome Institute for the History of Medicine (London: The Wellcome Institute, 1984).

¹⁷ Dominik Wujastyk, A Handlist of the Sanskrit and Prakrit Manuscripts in the Library of the Wellcome. Institute for the History of Medicine: Volume 1 (London: The Wellcome Institute, 1985).

¹⁸ R.C. Dogra, A Handlist of the Manuscripts in North Indian Languages in the Library (London: School of Oriental and African Studies, 1978).

¹⁹ F. Taylor, 'The Oriental Manuscript Collections in the John Rylands Library', Bulletin of the John Rylands Library 54 (1971-72), pp.449-478.

Pearson's surveys.20 To be added to Pearson's observations is the collection of seven Indic manuscripts (subject matter unknown) in the Horniman Museum and Library, London, and some Sanskrit manuscripts seen by Prof. V. Raghavan at Darlington, Aberystwyth, and elsewhere during his tour of 1954.²¹ There are certainly many more in private hands.

Introduction to the lists of manuscripts

The three lists of manuscripts attached, together with the published handlist of the Wellcome collection, cover the most important and largest collections of previously uncatalogued medical manuscripts in the British Isles. It will readily be seen that the amount of detail it has been possible to give varies considerably.

Fairly extensive extracts are given from the Cambridge manuscripts, since no fuller

cataloguing of this collection is envisaged in the foreseeable future.

Less detail is given in the Wellcome handlist because of the sheer bulk of the collection as a whole, and the necessarily rapid pace which must be maintained in order to make any significant impression upon it. The collection may seem strong in modern copies from Nepal and Thanjavur, and in alchemy: this is just a reflection of the interests of the present author, and this emphasis will no doubt be modified when the whole collection has been listed. Following this, descriptive catalogues are planned.

The Oxford manuscripts will be the subject of a future volume of the descriptive catalogue of the Chandra Shum Shere collection, and are therefore only noticed briefly here.

Finally, the British Library manuscripts are simply listed by title, following the list of Mr. Losty. A descriptive catalogue of the British Library collection is a most important desideratum.

The conventions used are standard. Passages which were barely legible are italicized. I have strictly transcribed what the manuscripts say in all cases, including the many errors. Akşaras within braces are marginal insertions by the scribe. Bibliographical references are mainly to Aufrecht's Catalogus Catalogorum (CC), Raghavan's New Catalogus Catalogorum (NCC) and G.J. Meulenbeld, The Mādhavanidāna and its Chief Commentary ... (Leiden: E.J. Brill, 1974) (Meulenbeld, MN). As regards other references, a placename stands for the corresponding catalogue of the collection held there (note also self-explanatory abbreviations such as e.g. IO for the India Office); other abbreviations are, apart from those for well-known journals (e.g. ZDMG), the same as those listed on pp.x-xiii of op. cit. in note 16. Titles of works described are in Roman alphabetical order.

Future investigations

These British manuscripts suggest several lines of research. The Cambridge Vangasena, which calls itself the Vaidyavallabhasangraha, opens an important line of

²⁰ J.D. Pearson, Oriental Manuscripts in Europe and North America: a Survey (Zug: Inter Documentation Company, 1971), pp.374-382, and the addendum 'Oriental manuscripts', in South Asian Bibliography: a Handbook and Guide, compiled by the South Asia Library Group (Hassocks, Sussex: Harvester, 1979), pp.3-

²¹ A copy of Raghavan's notes on these MSS is in the hands of Prof. D. Pingree, at Brown University.

enquiry, for which a sound knowledge of the Nepalese script is required. The Cambridge manuscript of Gayadāsa's commentary on Suśruta covers the unpublished portion of the commentary on the śārīrasthāna. The vrddha Yogaśataka text in the two Oxford manuscripts must be examined and compared with the better known shorter recension, and with the Yogaśataka by Amitaprabhā in the same collection. The Sannipātacandrikā (or kalikā, or -arņava) and its relationship to the Aśvinīkumārasamhitā and the place of the author Māṇikya in all this, requires clarification, and the manuscripts in Oxford and the Wellcome collection will facilitate this. Other little known works include the Sārasangraha by Ganeśa Bhisak (Oxford), the Vaidyavilāsa by Gopāladāsa (Oxford), the Vaidyahitopadeśa by Śrīkanthaśambhu (Oxford and Wellcome), and the Siddhāntadīpa by Paramananda Miśra. The Wellcome manuscript of this last work is fragmentary, but the missing parts have been traced to the library of Bombay University. This sort of join is rare in codicological studies, and very satisfying when it does happen. The scribe and author Rāmacandra Śarman, whose name occurs prominently amongst the Wellcome manuscripts, seems to have been an assistant to Dr. Paira Mall. His large compilation the Cikitsāprabandhasamuccaya is probably not very original in content, but nevertheless needs to be placed in its context as a 20th century medical nibandha, together with the rest of his work as a scholar of ayurveda. Dr. Mall himself is an interesting figure, and deserves attention as the collector of a major Sanskrit library.²²

Some may be surprised to find copies of both the *Bhelasaṃhitā* and Ravigupta's *Siddhasārasaṃhitā* (the 'Paris *Siddhasāra*') in the Wellcome collection. These are both 20th century copies of the originals in Thanjavur and Madras respectively. There is a new commentary on the *Vaidyajīvana* by Bhagīratha in the Wellcome collection, and a new commentary on the *Rugviniścaya* by Jñānameru, previously only known as a Gujarātī author, in Oxford. Other works will no doubt strike the reader as he or she peruses these lists.

Manuscript studies are often difficult, always time-consuming, and usually unfashionable. Added to this is the serious problem that the production of a critical edition of a text, or a descriptive catalogue of a manuscript collection, does not (at least in England) qualify as a suitable project for a doctoral dissertation. With these barriers in place, progress in this field is always going to be slow. Yet it is at least arguable that the entire edifice of Indological studies is founded upon the manuscript record. It still seems worthwhile, then, to draw attention to the valuable medical manuscript collections in Britain, and maybe students of Ayurveda will be encouraged to take up the fascinating challenge which these manuscripts present to the historian of science.²³

²² His correspondence relating to the period of his collecting activities is in the Wellcome Institute's archives.

Some selected works relating to codicology in this area: Stillman Drake, 'Editing unpublished notes, such as Galileo's on motion', in Editing Texts in the History of Science and Medicine edited by Trevor H. Levere (New York and London, 1982); S.M. Katre, Introduction to Indian Textual Criticism (Poona, 1954); V. Raghavan, Manuscripts, Catalogues, Editions, (Bangalore, [1963]); L. D. Reynolds and N. G. Wilson, Scribes and Scholars: a Guide to the Transmission of Greek and Latin Literature (Oxford, 1978); M.L. West, Textual Criticism and Editorial Technique (Stuttgart: Teubner, 1973). These works also contain bibliographies for further reading. Also of interest might be the study of the transmission of medieval Western vernacular poetry and other medieval and Byzantine literatures, which share problems with the Indian case. However, as West sagely observes, after the basic principles are known, textual criticism is learned by doing, not by reading about it.

Appendix I

Ayurvedic manuscripts in the Chandra Shum Shere collection, Oxford

Abhrakavidhi

leaves 1, 2: paper. — In Sanskrit. — Marginal initials: abhra. kri. and abhra. vi. — Bibliography: not in NCC. — Complete. — Devanāgarī script.

Begins: [...] atha a[bhra]kaśodhaṇamāranavidhi pīnākaṃdurduraṃ nāgaṃ vajram abhraṃ caturvidhaṃ 4 dhmataṃ vahnau dalaṃ cāpapīnākaṃ viśvarūpakaṃ

Ends: abhrakam [vi]vidham proktam yathā yoge sāvidham valīpalitahīno pi jīvet samvatsarām śatam iti sahasrapuṭam abhraka []vidhih [...].

Shelved at d.723(2). Library foliation: 6, 7.

Ajīrņamañjarī / Kāśīrāja

leaves 1-3: paper. — In Sanskrit. — Covers verses 1-21.5 only. — Devanāgarī script.

Shelved at d.742(6). Library foliation: 126-128.

Ajīmamanjarī / Kāśīrāja. — AD 1618

leaves 1, 3-5: paper. — In Sanskrit. — Date of copying: samvat 1675 āṣāḍe māse śukle pakṣe dvitīyāyām tithau ravivāsare samāptam śubham astu. — Bibliography: NCC 1.87b-88a. — 42 verses, with lacuna. — Devanāgarī script.

Shelved at d.742(6). Library foliation: 130-133.

Anjananidana / Agnivesa

leaves 1-14, [15]: paper. — In Sanskrit. — Bibliography: NCC 1.89b. — Complete in 236 verses. — Devanāgarī script.

Shelved at d.730(1). Library foliation: 3-17.

Añjananidāna / Agniveśa

leaves 1-24: paper. — In Sanskrit. — Bibliography: NCC 1.89b. — Complete. — Devanāgarī script. Shelved at d.734(6). Library foliation: 136-159.

Añjananidāna / Agniveśa. — AD 1752

leaves 1-12: paper. — In Sanskrit. — Copied by Dviveda, Jayāhireṇa(?). — Date of copying: Saturday 14 śuklapakṣa of adhika Bhādrapada, saṃ 1809. — Bibliography: NCC 1.89b. — Complete in 235 verses. — Leaf 1r has 4 + 6 medical alchemical verses. — Devanāgarī script.

Leaf 1r has: atha kuṣṭharogādau | [...] samamṭamkaṇadhānyābram [...] gaganagarbho rasaḥ Leaf 1v begins: [...] avodhatimira[...]

Shelved at d.713(6). Library foliation: 73-84.

Añjananidāna / Agniveśa. — AD 1813

leaves 1-19, 21: paper. — In Sanskrit. — Date of copying: 13 kṛṣṇapakṣa of Bhādrapada, śāka 1735, called subhānu. — Bibliography: NCC 1.89b. — No lacuna; complete in 233 verses. — Devanāgarī script. Shelved at d.723(12). Library foliation: 177-196.

Anjananidāna / Agniveśa. - AD 1822

leaves 1-14: paper. — In Sanskrit. — Formerly property of Baladeva Dave. — Copied by Visnudāsajī.

- Date of copying: Friday 13 kṛṣṇapakṣa of prathama Āśvina, saṃvat 1879. Copied in Vṛndāvana.
- Bibliography: NCC 1.89b. Red and black ink. Complete in 224 + 4 verses. Devanāgarī script. Shelved at d.717(5). Library foliation: 128-141.

Añjananidāna / Agniveśa

[With] Anjanaśalākā

leaves 1-4: paper. — In Sanskrit. — Commentary title from verse 2. — Bibliography: text: NCC 1.89b; no reference to commentary. — Gives pratīkas of mūla only. Incomplete. — Incomplete. — Devanāgarī script.

Begins, leaf 1v:[...] namo śvinīkumārābhyām yatprasādād idam jagat | nirujam lakṣyate lokair mahāmohāndhadṛṣṭibhiḥ | 1 | ājñānadhvāntaparyyastasūkṣmārthasya prakāśikām | amjanasya śalākākhyām vyākhyām kurve yathāmati | 2 | avodheti | agniveśo muniḥ ākhyayā amjanam sūkṣmam gramtham karoti [...]

Shelved at d.733(5). Library foliation: 194-197.

Añjananidāna / Agniveśa. — AD 1819

[With] Hindī commentary

leaves 1-26, [27], 28, [30]: paper. — In Sanskrit and Hindī. — Copied by Laksmana, of the Gautama gauḍa jñāti. — Date of copying: Tuesday 10 of a month in saṃ 1876 [1873?]. — Copied in Kāśī. — Complete in 233 verses. — Devanāgarī script.

Begins, leaf 1v: [...] avdhodhatimirachanna [sic ...] kupyati vegavadhair anilah 3 tīkā kutuvastake sevanese tiktavastuke sevanese kasailīvastuke sevanese vadarīke bharāso cot |

Shelved at d.734(5). Library foliation: 105-134.

Ārogyacintāmaņi / Dāmodara. — AD 1482

leaves 2-65, [66]: paper. — In Sanskrit. — Date of copying: Friday 13 kṛṣṇapakṣa of Mārgaśīrṣa, sam 1539. — Bibliography: NCC 2.165b. — The colophon says the work was copied during the reign of a king Tejaḥpāla. — Nepalese style Nāgarī script.

Shelved at d.711. Library foliation: 3-67.

Astāngahrdayasanıhitā / Vāgbhaṭa

218 leaves: paper. — In Sanskrit. — Date of copying: XVI cent?. — Bibliography: NCC 1.461a ff.

— Covers up to the end of the Kalpasthāna. — Devanāgarī script. — Some pṛṣṭhamātrā vowels.

Shelved at d.739. Library foliation: 3-220.

Aştāngahrdayasamhitā / Vāgbhata

231 leaves: paper. — In Sanskrit. — Leaves from several different manuscripts, in several hands. — Leaf 143v calls the author vrddha Vāgbhaṭa. — Bibliography: NCC 1.461a ff. — Jaina Nāgarī script. Shelved at d.740. Library foliation: 3-233.

Astāngahrdayasamhitā / Vāgbhata

leaves 4-8: paper. — In Sanskrit. — Bound with the Bhāvaprakāśa (q.v.). — Covers the end of the first adhyāya of the sūtrasthāna, and the start of the second adhyāya. — Devanāgarī script.

Shelved at c.303(3). Library foliation: 155-159.

Aştāngahrdayasamhitā / Vāgbhata. — AD 1841

leaves 4-59, 59a[= 60], 61-97, [98], 99-152: paper. — In Sanskrit. — Date of copying: śaka 1763, sam 1898. — Bibliography: NCC 1.461a ff. — Covers complete sūtrasthāna. Copied by several scribes. — Devanāgarī script.

Shelved at d.741. Library foliation: 3-151.

Auşadhikalpa

leaves 1-25: paper. — In Sanskrit. — From an āgama (āgamokta). — Bibliography: NCC 2.105b. — Devanāgarī script.

Begins, leaf 1v: [...] athāgamoktā auṣadhīkalpaḥ atha lakṣmanālpakṛkṛpakṣe caturdaśyāṃ guguru puṣpetha lakṣma{ṇaṃ} samaṃṣaṃtu samuccārya sopacāraṃ samuddharet | oṃ sarvārthasādhanalakṣmaṇāṃ svāhā śubhaṃ tanmūlam ādāya kṛṣṇonmataphale sthitaṃ tridinaṃ caiva sūtreṇa maṃtrcūrṇena vaśyakṛt 2

Leaf 25v ends: dhātrīrasena saṃyuktaṃ ajīrnaṃ harate dhruvaṃ gudena sahitaṃ gaṃdhaṃ pramehaṃ ca vināśanaṃ rasena gaṃdhakaṃpotaṃ sarvavyādhivināśanaṃ 23 [text breaks off].

Shelved at d.734(3). Library foliation: 58-82.

Ayurvedalakşaṇādhyāya

leaves 1-5, [6]: Blue machine made paper. — In Sanskrit. — Title from likhyate phrase. — Marginal initials: la[kṣaṇa]. a[dhyāya]. — Bibliography: not in NCC. — Portrait layout. — Watermarked: John Miller Extra Super Glasgow 1869. Red interlinear and marginal glosses. — Devanāgarī script.

Begins, leaf 1r: [...] athāyurvedāmtargatalakṣaṇādhyāyaprāraṃbhaḥ | tatrādau cikitsālaksaṇaṃ |. yā kriyā vyādhiharaṇī sā cikitsā nigadyate | doṣadhātumalānām yā sāmyakṛt saiva rogahṛt | 1 |

Ends, leaf 8r: anyāni cettham bhūtāni svapnajāgaritāni ca | paśyan maranasamtrasto nidrām lebhe na cimtayā | 49 |

Shelved at c.304. Library foliation: 3-8.

Āyurvedamahodadhi / Suṣeṇa

48 leaves: paper. — In Sanskrit. — Bibliography: NCC 2.153a-153b. — Portrait layout. — Leaves [20], 21, [22], 23, [24, 25, 27], 28-32, [33], 34-41, [43], 44-48, 51-55, 57, [58, 66-68], 69, 70, 4 leaves, 56, 55, 3 leaves. — Devanāgarī script.

Followed by:

4 leaves (library fols. 42-45) of mixed Sanskrit and Hindī;

2 leaves (library fols. 46, 47) of miscellaneaous verses;

2 leaves (library fols. 49, 50) on magic.

Shelved at d.721. Library foliation: 3-52.

Āyurvedaprakāśa / Mādhava Upādhyāya

leaves 1-15: paper. — In Sanskrit. — Called Pākāvalī by Ashutosha. — Formerly property of Śańkaradatta. — Date of copying: Friday 6 of Jyeṣṭha, of a year ending in 70 (i.e. probably AD 1713 or 1813). — Left of all leaves torn. — The ending on-leaf 15r is the same as css d.713(9), leaf 29r; cf. css e.140(2); title and author assigned from this likeness. — Devanāgarī script.

Shelved at d.716(5). Library foliation: 134-148.

Āyurvedaprakāśa / Mādhava Upādhyāya. — AD 1813

leaves 1-26, 30-41, [42]: paper. — In Sanskrit. — Called the Pākāvalī in opening phrase. — The author was of the Sārasvatakula. — Date of copying: 5 kṛṣṇapakṣa of Kārttika, saṃ 1870. — Covers the pākādhyāya only. — Devanāgarī script.

Shelved at e.140(2). Library foliation: 22-61.

Āyurvedaprakāśa / Mādhava Upādhyāya. — AD 1857

leaves 1-26, 29: paper. — In Sanskrit. — Title from colophon. — Called the Pākāvalī in the opening phrase. — Formerly property of Viśvanātha Dvivedin. — Copied by Viśvanātha Dvivedin. — Date of copying: Monday 11 śuklapakṣa of Māgha, saṃ 1914. — Covers the pākādhikāra only. Leaf 29 is by a different hand. — Devanāgarī script.

Shelved at d.713(9). Library foliation: 106-132.

Āyurvedasangraha / Dāmodarabhaṭṭa Cittapāvana

leaves 1-4, 6, 7: paper. — In Sanskrit. — The author was the son of Jānakī and Raghunātha. — Bibliography: not listed at NCC 2.153b; On this author's jyotişa work see NCC 9.22b, and CESS A3.101a. — Devanāgarī script.

Begins, leaf 1v: [...] sarasvatī siṃdhusutā pradāya namo stu te vighnavināyakāya | nairmalyavijñānadabhāskarāya manorathās tvatsmaraņena pūrņāḥ | 1 | jñānapradīpoktagadānnihaṃtuṃ krameṇa vakṣye bhisajāṃ hitārthaṃ | munipraṇītānvahuśonubhūtā cikitsais tadvicitiṃ karomi | 2 | tatrādau jvaraḥ |

Ends, leaf 7v: iti śrījānakīraghunāthātmajacittapāvanadāmodarabhaṭṭakṛtāyurvedasaṃgrahe jīrṇajvarādhi[kāra]ś caturthaḥ |

Shelved at d.733(3). Library foliation: 169-174.

Bālacikitsā

leaves 1-4: paper. — In Sanskrit. — Title from the likhyate phrase. — Called Bālānām paṭala in the colophon. — From the Kriyākālagunottara, according to the colophon. — Copied by Manasārāma. — Date of copying: the interpretation of the bhūtasankhyā is not clear. — Copied in Laharapura. — Bibliography: on the Kriyākālagunottara, NCC 5.131b-132a. — Complete. — Devanāgarī script.

Begins, leaf 1v: [...] atha vālacikitsā | pūtanāśakunī nāmnī gṛhṇīte māsajātakaṃ | tayā gṛhītamātras tu kākarāvaṃ pramuṃcati |

Ends, leaf 4v: anenaiva vidhānena tato muṃcati sā grahī | 16 | iti śrīkriyākālaguṇottare vālānāṃ paṭalaṃ samāptaṃ | munīndrāvjadhṛtyāyute [= 7-14-1-18] vde nabhasye site rkke mṛgendre caturthyāṃ manīṣī | lilekārkkajāte savāte hṛdi dhyāyatajjānakījānipādāravindam | manasārāmo laharapure vālacikitsām iti śeṣaḥ |

Shelved at d.713(7). Library foliation: 86-89.

Bālarogādhikāra. — AD 1841

leaves 1-13: paper. — In Sanskrit. — Title from the likhyate phrase. — Date of copying: sam 1898. — Complete. — Devanāgarī script.

Begins, leaf 1v: [...] atha vālarogādhikāraḥ

vālagrahā anācārāt pīdayamti śiśum yatah

tasmāt tad upasargebhyo rakșed vālam prayatnatah 1

Ends, leaf 13v: matsarājasya pitena marica bhāvayed vudhaḥ

ravivāre raudraśaḥ śuşkam amjanāt sarbabhūtajit

iti vālarogaḥ sabat 1898.

Shelved at d.713(10). Library foliation: 134-146.

Bhāvaprakāśa / Bhāvamiśra

243 leaves: paper. — In Sanskrit. — Bibliography: Meulenbeld, MN 417. — Leaves 1-3, 14-145, 145a, 145b-163, 163a-178, 178a, 179, 185-233, 233a-252. — Jaina style Devanāgarī script.

Shelved at d.715. Library foliation: 3-245.

Bhāvaprakāśa / Bhāvamiśra

v.1: 3-249, v.2: 3-172, v.3: 3-214, v.4: 3-164: paper. — In Sanskrit. — Bibliography: Meulenbeld, MN 417. — Bound in 4 volumes. — V.1, libr. fol.2, has a detailed analysis of contents by Gambier-Parry, dated Feb. 1918 and Sept. 1921, comparing the MS with the Calcutta 1875 edition. — With parts of the Kṣema-kutūhala, a sūtrasthāna (qq. vv.), and a nyāya work. — Devanāgarī script.

Shelved at c.300(-303). Library foliation: 4 vols.

Bhojanahitāhitavicāra

leaves 1-9: paper. — In Sanskrit. — Complete. — Devanāgarī script.

Leaf 1r has: vaidya[tear]bhojane hitāhi[tear]

Begins, leaf 1v: [...] atha hitavargam āha | śālidhānyam vrīhdhānyam śūkadhānyam trtīyakam |

Ends, leaf 9v: rājāvahnigurus triyah | iti [...].

Shelved at d.713(3). Library foliation: 25-33.

Cikitsākalikā / Tīsața

leaves 1-23: paper. — In Sanskrit. — Formerly property of Gadādhara Jośī. — Copied by Gadādhara Jośī, son of Vaikuṇṭha. — Copied in Narmadātaṭa. — Bibliography: cf. NCC 7.25b-26b. — Complete. — Devanāgarī script.

Shelved at d.716(2). Library foliation: 51-73.

Cikitsāñjana / Vidyāpati

leaves 1-17: paper. — In Sanskrit. — Author is called Vidyāpati Upādhyāya in colophon. — Bibliography: NCC 7.27a. — Complete. — The colophon is followed by 5 lines on medicine. — Devanāgarī script.

Shelved at d.726(4). Library foliation: 176-192.

Cikitsāsangraha / Vangasena

leaves 12-21, 26-47, ka, kha, na, ca, cha, ta, tha, da, dha, [7], 8, 12, 42, 125, 139, 149, 153, 156, 183, 196, 206, 298, 302, 321, 322, 326-330, 406, 407, 414, 422-424, 426-428, 430-436, 443, 447, 455, 456: paper. — In Sanskrit. — Marginal initials (leaves 12-47): vamga. — Date of copying: possibly partly 16th century. — Bibliography: NCC 7.31b-32a. — Leaves 12-21, 26-47, and [7]-456 in different hands. — Devanāgarī script.

Shelved at d.738. Library foliation: 3-83.

Cikitsāsārasangraha / Cakrapānidatta

leaves 2-35, 46-49, 40-211, 192-276, 278-289, 280-283: paper. — In Sanskrit. — Title from note on leaf 283. — Bibliography: NCC 6.284a. — Ff. 249-50 in red ink. — Gambier-Parry note: 'From śloka 9 (end)'. — Bengāli script.

Shelved at d.743. Library foliation: 3-313.

Cikitsāsārasangraha / Cakrapāņidatta. — AD 1648

leaves 1-53, 55-151: paper. — In Sanskrit. — Formerly property of Bālamukunda. — Copied by Ghanaśyāma Tripāṭhin. — Date of copying: Wednesday 12 śuklapakṣa of Phālguna, saṃ 1705. — Bibliography: NCC 6.284a. — Devanāgarī script.

Shelved at c.306. Library foliation: 3-152.

Cikitsāsārasangraha / Vangasena

leaves 1-67: paper. — In Sanskrit. — Complete text of extracts. — Devanāgarī script. Shelved at c.312. Library foliation: 3-69.

Cikitsāsārasangraha / Vangasena

leaves 1-31, 1, 22, 34, 35, [36]: paper. — In Sanskrit. — Bibliography: NCC 7.31b-32a. — Leaves 1-31 cover verses 1-441. — Leaf [36] consists of 23 lines on making vamgesvararasah. — Devanāgarī script. Shelved at g.12. Library foliation: 3-38.

Dhanvantarinighantu / Dhanvantari

leaves 1-37, 1-3: machine made paper. — In Sanskrit. — Bibliography: NCC 9.228b-229b. — Watermark: P.O.D. & Co. 1867. Last three leaves in a different hand. — Devanāgarī script.

Shelved at c.305(3). Library foliation: 69-108.

Dravyaguna / Mādhava Kavi

leaves 3-33, 36, [37], 38-42, 44: paper. — In Sanskrit. — Bibliography: NCC 9.179b-180a; commentary not in NCC. — Devanāgarī script.

Shelved at d.723(11). Library foliation: 137-175.

Dravyaguṇaratnamālikā / Madhu

leaves [1, 2], 3-7, [8-10], 11-55, [56, 57]: paper. — In Sanskrit. — Bibliography: cf. NCC 9.179b. — Devanāgarī script.

Shelved at e.135. Library foliation: 3-59.

Dravyaguņasataslokā / Trimalla Bhatta

leaves [i], 1, 3, 4-8, 13: paper. — In Sanskrit. — Bibliography: NCC 9.179b-180a. — Leaves in different hands. — Devanāgarī script.

Shelved at d.723(6). Library foliation: 61-69.

Dravyaguņaśataślokā / Trimalla Bhaṭṭa

leaves 1-16, [17]: paper. — In Sanskrit. — Bibliography: NCC 9.179b-180a. — Complete in 101 verses. — Devanāgarī script.

Shelved at d.733(4). Library foliation: 176-192.

Dravyagunaśataśloki / Trimalla Bhatta. - AD 1658

leaves 2, 4-18: paper. — In Sanskrit. — Formerly property of Mādhavabhaṭṭa, son of Rāmajībhaṭṭa. — Copied by Mādhavabhaṭṭa, son of Rāmajībhaṭṭa. — Date of copying: Sunday 10 śuklapakṣa of Vaiśākha, saṃ 1715. — Bibliography: NCC 9.179b-180a. — Bound with leaf 1 of the Vaidyahitopadeśa of Śrīkaṇṭhaśambhu (q. v.). — Devanāgarī script.

Shelved at d.735(5). Library foliation: 104-119.

Dravyaguņašatašlokī / Trimalla Bhatta. — AD 1778

[With] Dravyadīpikā / Kṛṣṇadatta

leaves 1-50: paper. — In Sanskrit. — Date of copying: 8 kṛṣṇapakṣa of Bhādrapada, saṃ 1835. — Bibliography: NCC 9.180b. — Complete in 101 verses. — Devanāgarī script.

Shelved at d.734(8). Library foliation: 172-221.

Dravyaguyņaśataślokī / Trimalla Bhaṭṭa. — AD 1863

leaves 3-13: paper. — In Sanskrit. — Formerly property of Mālavaraghunāthapaṇḍita. — Date of copying: 4 śuklapakṣa of Kārttika, saṃ 1920. — Bibliography: NCC 9.179b-180a. — Complete in 103 verses. — Devanāgarī script.

Shelved at c.308(1). Library foliation: 3-13.

Dravyāvalīnighanţu

leaves 2-18, 19, 19a-19d, 20-40: paper. — In Sanskrit. — Marginal initials: dha. ni. — Bibliography. cf. NCC 9.185a. — Leaves 19a-19d (covering verses 1-48) on different paper in a different hand. — Jaina style Devanāgarī script. — Some pṛṣṭhamātrā vowels.

Leaf 2r starts: na vetti paśyann api bheşajāni |

kriyā kramo bheşajamūlam eva

tad bheşajam vāpi nighamṭamūlam | 13

Ends, leaf 40v: śuvarṇādir iyaṃ vargaḥ saṣṭa ukto yathākramaṃ | dhātudravyadravadravyamāṃsadravyasamāśrayaḥ | yogāmegarakuṣṭodarārttidmaḥ śokadoppanipūdanaḥ | śatatrayaṃ ca dravyāṇāṃ | trisaptadhikottarāṃ hitāya vaidyaputrāṇāṃ dravyāvallyāṃ prakāśitaṃ dhātudravyadrava[... as before]samāśrayaḥ | iti dravyāvalī samāptā | [remainder obscured by tipping].

Shelved at d.717(3). Library foliation: 67-108.

Govindaprakāśa / Govindamiśra

leaves [1], 2-7, [8], 9-45, 64-78, 83-130, 171, 172, 186-203, 206, 208-221, 223, 225, 227-249, 251-253, 255-261, 263, 265-274, 276-284, 286-299, 301-319, 321-357, 359, 360, 362-366, 368-409, 411, 413-425, 433, 435-439: paper. — In Sanskrit and Hindī. — Bibliography: NCC 6.200b; cf. 10.29a. — Devanāgarī script. Shelved at c.312. Library foliation: 4-340.

Gunanighantu. — AD 1814

leaves 78-105: paper. — In Sanskrit. — Marginal initials: gu. ni. — Date of copying: 12 śuklapakṣa of Kārttika, saṃ 1871. — Copied in Kāśī(?). — Bibliography: not in NCC. — Devanāgarī script.

Leaf 78r starts: timdukadvayamāmamtukaşāyam grāhīvātajit | sūpakvam gurupāke tu madhurām

kaphavātajit | vemhakaļīm nāma | himganbeța |

Ends, leaf 104v-105r: vargo yamiśrako nāma saptamaḥ parikīrtitaḥ | iti damuktaṃm akhilaṃ nighaṃṭaṃ jñānam uttamaṃ | bhīṣajājñānavṛdhyarthaḥ dhanvaṃtarivinirmitaṃ | iti dhanvaṃtarīyo nighaṃṭaḥ samāptaḥ | iti śrī guna[sic]nighaṃṭagraṃthasaṃūrṇam astu śrīkāśīviśveśvarārpaṇam astu saṃvat 1871 pārthīvanāma saṃvatsare kārttikamāse śuklapakṣe śuddha 12

Leaf 105v has: itī śrīguṇanighaṃṭa graṃtha sampūrṇam astu | vaidya prakaraṇaṃ |

Shelved at d.730(5). Library foliation: 57-84.

Guṇaratnamālā / Maṇirāma Miśra. — AD 1831

leaves 1-7, 9-21 (no lacuna): paper. — In Sanskrit. — Formerly property of Jagannātha. — Copied by Mānikarāma Gujarātī. — Date of copying: 11 kṛṣṇapakṣa of Śrāvaṇa, saṃ 1888. — Copied in Brahmāghāṭa. — Bibliography: not in NCC; cf. 6.52a. — Apograph of a MS of saṃ 1839(?). — Complete in 128 verses + 4 maṅgala verses. — Devanāgarī script.

Leaf 1r has: jagannāthasyedam pustakam

Begins, leaf 1v: [...] garjadgambhīranīrapradanikaramahācamdavātamakam patsampāsamkvātapātapracurataramahāsāradhārāprayātaih [...] kriyate guņaratnamālā 2

Leaf 21r-21v has: iti śrīmaṇirāmamiśraviracitāyāṃ guṇaratnamālāyā[m] auṣadhīnāma phalaṃ samāptam | subhaṃ maṃgalaṃ [...] śrīsaṃvvatā 1839 durggācaśivanetravaúṃśaśī mā[leaf 21v]ghamāsi sitapakṣa trayodaśī lakṣyalakṣmaṇapure śanīcarī pāṭhikā ca svam eva lekhakī | 132 dhāśrīkṛṣṇjī sahā vra i | saṃvat 1888 śāvanavadī ekādasī 11 vārasuniņe likhitaṃ mānikarāmagujarāti alajosimakāṃ na brahmāghāṭapara daravājaipara ṭhīkānā cīṃtāmanaganesajī ke vāhā |

yan maithunādi grhamedhisukham hitucham

kamduyanena karayor iva duhkhaduhkham.

Shelved at d.735(2). Library foliation: 17-36.

Hārītasamhitā / Hārīta

leaves 1, 3-39, 42-44, 46-49, [50], 51-53, 1 leaf, leaf 68: paper. — In Sanskrit. — Title from note on leaf 1r. — Devanāgarī script.

Shelved at d.716(4). Library foliation: 82-132.

Hṛdayadīpikā / Vopadeva. — AD 1647

leaves 1-10: paper. — In Sanskrit. — Copied by Jānījayarāma. — Date of copying: Monday 4 kṛṣṇapakṣa of Jyeṣṭa, saṃ 1704. — Complete. — Jaina style Devanāgarī script.

Shelved at d.723(10). Library foliation: 126-135.

Hṛdayadīpikā / Vopadeva. — AD 1711

[With] Paripūrtti / Nāganātha

leaves 3-14: paper. — In Sanskrit. — Date of copying: 1st day of śrāvaṇa, saṃ 1768. — Bibliography: on Nāganātha cf. NCC 10.4b. — Complete. The date śaka 1597 | AD 1675 may be the date of composition of Nāganātha's supplement. — The Hṛdayadīpakanighaṇṭuparipūrtti by Nāganātha (ff.11r-12), is a supplement to Vopadeva's work. — Devanāgarī script.

Shelved at c.311. Library foliation: 3-14.

Jvarādhikārasaṅgraha

leaves 1-10, 14, [15]: paper. — In Sanskrit. — Extracted from a larger work. — Bibliography: not in NCC. — Devanāgarī script.

Begins, leaf 1v: [...] atha madhyamaḥ khaṇḍaḥ | tatra jvarādhikāram āha | yataḥ samasta rogāṇāṃ jvaro rājeti viśrutaḥ | ato jvarādhikāro tra prathamaṃ likhyate mayā | tatra jvarasya prathamām utpattim āha dakṣāpamānasaṃkṛddha

Ends, leaf [15]r: tam vişamodair gharātriko gambhīras ca hamtīty arthah | iti jvarādhikārah | [followed by an alchemical recipe].

Shelved at d.713(4). Library foliation: 35-46.

Jvarapaddhati / Balabhadra. — AD 1841

leaves 1, 21-27, 33, 34, 29: paper. — In Sanskrit. — Marginal initials: jva. pa. throughout. — Copied by Durgāprasāda. — Date of copying: Friday 1 kṛṣṇapakṣa of Āśvina, saṃ 1898. — Bibliography: not in NCC. — Leaves 33, 34 may be from another MS. — Devanāgarī script.

Begins, leaf 1v: [...] natvā śivam tribhuvanārttiharam [...] | 1 | vilokya suśrutam vṛṃdam hārītam vāgbhaṭādikān |

mayā lokahitārthāya lişyate jvarapaddhatih | 2 |

Leaf 21r starts: picumamdadalam sayavam saghṛtam abhayamilitam ca vidhūpanato viṣamajvara-sāmti{karam} vihitam 21 ity aparājito dhūpaḥ

Leaf 27r has a table of numbers and the alphabet;

Ends, leaf 29v: socīkarotpaddhatim 59 iti śrīnārāyaṇātmajavalabhadraviracitā jvarapaddhatiḥ samāptā śubhaṃ vo bhūyāt samvat 1898 tatrāśvine māsi kṛṣṇamalapakṣe tithau pratipadāyāṃ bhṛguvāsare likhitaṃ adaḥ pustakaṃ durgāpraśādena svapaṭhanārtha [...] asmin gṛṃthe ślokasaṃkhyā 551.

Shelved at d.735(7). Library foliation: 160-170.

Jvaratimirabhāskara / Cāmuṇḍa Kāyastha

leaves 31, 35, 38-43, 43a-49, 52-54, 56-64, 66-78, 7[9]: paper. — In Sanskrit. — Marginal initials: jva. bhā. — Leaves 31-49, 56-61, by a different scribe, have marg. inits.: jva. ti. ra., and may be another work. — Bibliography: NCC 7.378a. — Devanāgarī script.

Shelved at d.742(1). Library foliation: 3-43.

Jyotişmatikalpa. — AD 1800

leaves 1, 2: paper. — In Sanskrit. — May also be called Siddhirasāyanakalpa. — From the Yāmalatantra. — Copied by Vīreśvara Mahājani. — Date of copying: the kṛṣṇapakṣa of Māgha, saṃ 1857, śaka 1722. — Bibliography: NCC 7.371b. — Complete. Gives instructions on preparing and taking a rasāyana based on Jyotiṣmatī vallī. — Devanāgarī script.

Begins, leaf 1r: [...] devānām vacanam śrutvā sarvajño bhagavān haraḥ |

Ends, leaf 2v: iti śrīyāmalataṃtre īśvaraśektaḥ siddhirasāyanakalpaḥ | saṃ 1857 śake 1722 māgha kṛṣṇa | śurau likhitam idaṃ pustakaṃ mahājanyupākhyavīreśvareṇa [...].

Shelved at d.723(1). Library foliation: 3-4.

Kālajñāna / Sambhu

leaves 4-16, 19, 20: paper. — In Sanskrit. — Author's name supplied by cataloguer. — Bibliography: cf. NCC 4.19b-20b. — Devanāgarī script.

Shelved at d.730(3). Library foliation: 29-43.

Kālajnāna / Śambhu

leaves [2-4]: paper. — In Sanskrit. — Bibliography: cf. NCC 4.19b-20b. — Covers verses 20-118, 1-7 + a list of homas. — Jaina style Devanāgarī script. — Some pṛṣṭhamātrā vowels. Shelved at d.730(9). Library foliation: 154-156.

Kālajnāna / Sambhu

leaves 1-9: paper. — In Sanskrit. — Bibliography: NCC 1.89b; cf. 4.19b-20b. — Complete in 101 verses. — Devanāgarī script.

Shelved at d.734(7). Library foliation: 162-170.

Kālajñāna / Sambhu

105 leaves: paper. — In Sanskrit. — An old manuscript. — Scribal foliation is so faulty as to be useless. Quotes many sources, including Rasaratnākara (libr. fol. 104r et passim), Yogaratnāvalī (99r), etc. — The Kālajñāna is followed by a Nāḍīlakṣaṇa, a Mūtraparīkṣā, and a long compendium of recipes. — Devanāgarī script.

Shelved at e.136. Library foliation: 3-107.

Kşemakutūhala / Kşemaśarman

leaves 28-46: paper. — In Sanskrit. — Bibliography: NCC 5.612a. — Devanāgarī script. Shelved at d.723(9). Library foliation: 106-124.

Kşemakutūhala / Kşemaśarman

leaves 1-30: paper. — In Sanskrit. — Bibliography: NCC 5.162a. — In several hands. — Bound with the Bhāvaprakāśa (q.v.). — Devanāgarī script.

Shelved at c.303(2). Library foliation: 124-153.

Kvāthasangraha

leaves 2-10: paper. — In Sanskrit. — Title from note on leaf 10v. — Marginal initials: kvā. — Bibliography: not in NCC; cf. NCC 5.144a. — Devanāgarī script.

Leaf 2r begins: yamtu samam mūtram paripākahitam bhavet | kvāthāḥ | nāgaram devakāṣṭham ca dhānyakam bṛhatīdvayam | [...] | 1 |

Leaf 10r has: kārsapam ca vidhāyāmti śāmtim āśunasamśayah | 110 | ahalakatham na viśvāśrīphā[then in new hand:]brāhmīrugyaṣṭitiktomḍaja khadire vṛṣośīrarakta [...] | 1 |

Ends, leaf 10v: kṣārā padmakavṛddhijī vanatugā bhṛgvyardtvi puṃdraumṛtā tenyaprī ṇanavṛṣyabṛṃhaṇam arut pitta praṇuji vinaḥ | 6 |

Shelved at d.730(2). Library foliation: 19-27.

Lolimbarājaţippaņa

leaves 3-9, 15, 16: paper. — In Hindī. — Marg. inits., leaves 3-9: lolimbarājaţippaṇa; leaves 15, 16: lolimva. rā. udāharaṇa patra 1 (2). — Leaves 15, 16 have the Lolimbarājodāharaṇa. — Jaina Nāgarī script.

Leaf 3 starts: nețăleti masutikăroganem țăle 47 sanipătaseti sanipătanajekă late hano bheda nathīse ne jeko

Leaf 9v ends: 21 āyuveda itiḥ strīnākayāthi llolimmarājakasyo che iti vaidyajīvana ṭīpana sapūrṇam sam 1857 śāke 1722 pravarttamāne māsotamamāse śrīphāguṇamāse kṛṣṇapakṣe dvādaśyām tithau bhauvāre śrī [...] upādhyāyajī śrīkirttisumdarajīgaṇi tataśiṣya pam | praṣṇacaṃda lipīkṛte śubham bhavatu

Leaf 15r starts: śrīgaņeśāya namaḥ | pamcāsya pamcadaśanetra pidhānadakṣā

Leaf 16v ends: āvato hoyacasakaśleṣmāvāyuṭalāroga[text breaks off].

Shelved at d.713(11). Library foliation: 148-156.

Madanavinodanighanțu / Madanapāla

leaves [1-4], 5-41, 41a-47: paper. — In Sanskrit. — Bibliography: Vogel, HIL, IL, p.376. — Devanāgarī script.

Shelved at d.729. Library foliation: 3-52.

Madanavinodanighanţu / Madanapāla

leaves 1-62, 1-5, 4-35: paper. — In Sanskrit. — Devanāgarī script.

Shelved at d.733(2). Library foliation: 69-167.

Madanavinodanighanţu / Madanapāla. — AD 1702

leaves 1-34: paper. — In Sanskrit. — Date of copying: Wednesday 13 kṛṣṇapakṣa of Jyeṣṭha, saṃ 1759. — Complete. — Devanāgarī script.

Shelved at d.730(6). Library foliation: 86-119.

[Nighantuvaidyaka]

leaves 1-72, [73]: paper. — In Sanskrit. — Title from marginal initials. — Possibly called Nighanturatna. — Marginal initials: nighantakavaidya; ni. vai. — Jaina style Devanāgarī script.

Begins, leaf 1v: [...] abhāvāt sarvabhūtānām manasyamanatām gate

jo vibhāti namas tasmai viśvarūpāya vedhase | 1 |

namāmi dhanvamtarim ādidevam [...] | 2 |

aņekadeśātarabhāṣiteṣu [...] | 3 |

prayojanam [...] | tathā nighaṭamvunidheṣu ratnam

granāmy aham kim cid ihaikadeśam | 4 |

Ends, leaf [73]r: kedāram madhuram proktam vipāke gurudoṣalam | vaikaram [text breaks off]. Shelved at e.140(3). Library foliation: 63-135.

Padārthabodha

[With] Padārthabodhavivṛti

leaves 1-5: paper. — In Sanskrit. — Marginal initials: pa. bo. — Title inferred from opening verses. — Devanāgarī script.

Leaf 1r (libr. fol. 57r) has: atha padarthabodharambhah

Leaf 1v begins: [...] śrīgaņeśam śūrpakarņam gajavaktram mahodaram |

natvā padārthabodhasya vivrtim vivrnoty aham | atheha śāstrārambhe vighnaparisamāptaye.

Shelved at d.724(1h). Library foliation: 57-61.

Pākādhikāra

leaves 1-13: paper. — In Sanskrit. — Title from likhyate phrase. — Bibliography: not in NCC. — Leaf 1r once formed the end of another MS. — Devanāgarī script.

Leaf 1r has verses 35d, 36, then: iti śrī kālavivaraņasampurņam |

Begins, leaf 1v: [...] atha pākādhikāra likhyate | atha la{vem}gapāka |

Ends, leaf 13r: grahanyākalyānako nāma gudah |

Shelved at d.735(1). Library foliation: 3-15.

Pākāvalī

leaves 1-19: paper. — In Sanskrit. — Devanāgarī script.

Begins, leaf 1v: [...] atha pākāvalī tatrādau vrhatpūgapākah | pūgam dakṣiṇadeśajam

Ends, leaf 19v: vahvalpaviţkamatiśūlamasṛg vimiśramāmātisāram apahvaṃti harītakīyam | iti lachumadhupakvājarītakī | śrīḥ iti śrīpākāvalī samāptaḥ saṃpūrṇam [then 3 lines on water etc., then 4 lines on triphalā etc.].

Shelved at d.742(4). Library foliation: 85-103.

Pālāsakalpa

leaves 1-4: paper. — In Sanskrit. — Gives instructions for preparing elixir from the Brahmavrkşa. — Devanāgarī script.

Begins, leaf 1v: [...] atha vrahmavrkşakalpa

kailāse śikhare ramye nānādhātuvicitrite

nānādrumalatākīrņe nānāpuspo pi sobhite

Ends, leaf 4r: vimsativarsasahasrāņi jīamtīha na samsayah iti pāsakalpa samāptam |

Shelved at d.730(11). Library foliation: 170-173.

Pathyāpathyanimaya. — AD 1869

leaves 3-31, 31a-39: paper. — In Sanskrit. — Copied by Viśvanātha Dvivedin. — Date of copying: 5 śuklapakṣa of Māgha, saṃ 1925. — Copied in Kāśī. — The same work as CSS d.726(3), q.v. Two hands, leaves 3-24 and 25-39. — Devanāgarī script.

Leaf 3r begins: nām sukhāya | abhighātasamutthāne pānābhyangau ca sarppiṣah | kṣatajevranaje cāpi kṣatavranacikitsitam | 20 |

Leaf 39r has: vāleşu graharogişu | iti vālarogapathyāpathyādhikāraḥ | ariṣṭā

Ends, leaf 39v: bhajet kadācit | iti vişarogapathyādhikāraḥ samāptaḥ | mītīmāghasudī [in different hand:] 5 saṃvat 1925 likhitaṃ viśvanāthadvivedinā kāśyām |

Shelved at d.735(4). Library foliation: 64-101.

Pathyāpathyaviniścaya. - AD 1678

leaves 1-17, 20-26: paper. — In Sanskrit. — Formerly property of Ratneśvaramiśra. — Copied by Kṛṣṇa. — Date of copying: Monday 15 śuklapakṣa of Āṣāḍha, saṃ 1735. — Copied in Mukāma(?). — This is the same work as CSS d.735(4); leaf 3r, line 2 of this MS is the same as the beginning of leaf 3r of d.735(4). — Handed over to Ratneśvaramiśra at the pleasure of Gadādhara. — Devanāgarī script.

Leaf 1r has a table of contents for the MS;

Begins, leaf 1v: [...]

sritvā rajah satvatamāsiviśvam nirmāti yāti kşipati svayañ ca |

aśesavrdarakavrndavandya payadapayan manijanirisah | 1 |

ālokya [...] nivadhyate [...] pathyāpathyaviniścayaḥ | 2 |

Ends, leaf 26r: vālesu graharogisu iti bālarogapathyāpathyādhikāraḥ | bhuktvāpāṇitalaṃ dṛṣṭvā ca [...] | 84 |

iti pathyāpathyapustakam samāptam | [...] samvat 1735 samayāṣāḍhasudi pañcadaśyām candravāsare śrīkṛṣṇenālekhi mukāme |

[tri]şadtrisaptaikayukte 'bde śrīgadādharaprītaye |

madhau ratneśvaramiśraya śrikrsnah pustakam dadau

Shelved at d.726(3). Library foliation: 153-174.

Rājanighaņţu / Narahari

leaves 6, 28-96: paper. — In Sanskrit. — Torn leaves, esp. 69-95. — Devanāgarī script.

Shelved at c.308(3). Library foliation: 43-112.

Rasadīpikā. — AD 1666

leaves [1], 2-9, [10]: paper. — In Sanskrit. — Date of copying: Wednesday 4 kṛṣṇapakṣa of Caitra, saṃ 1723. — Bibliography: cf. NCC 2.119a. Is this work by Ānandānubhava? — N.B. The foliation of this volume skips from 113 to 104, thus repeating nos. 104-113. — Devanāgarī script.

Begins, leaf 1v: [...] atha rasadīpikā lişyate | imdrarīmirīśrīhemavamtīga-ragamtivisnugamthirudragamti |

Ends, leaf 10v: depam vvorekīsarvavātanāsayet | bha[tear] | iti rasadīpikā samāptā | subham astu | samvata 1723 samaya caitravadi 4 vāra vuddha tasmin divase lişitam gi.

Shelved at c.308(4). Library foliation: 104b-113b.

Rasamañjarī / Śālinātha

leaves 1-27, [28], 29-32, 34, 35: paper. — In Sanskrit. — The text breaks off at a point equivalent to MS CSS e.141, leaf 76r, line 2. This MS lacks leaves 33 and 36 only. — Devanāgarī script.

Shelved at d.742(2). Library foliation: 48-78.

Rasamañjarī / Śālinātha. — AD 1671

4 leaves, leaves 1-54, 56-76: paper. — In Sanskrit. — The author was the son of Vaidyanātha. — Formerly property of Anantajī. — Date of copying: saṃ 1728. — The leaves of this MS are bound in reverse order. — Devanāgarī script.

Shelved at e.141. Library foliation: 81-3 (sic).

Rasamāraņavidhi

leaves 1-4, 10, 12, 14, 15, 17-25, leaf 5: paper. -- In Sanskrit. - Devanāgarī script.

Begins, leaf 1v: [...] atha dhātumāraṇam | svarṇatārā ca tāmrāyuḥ patrāny agnau pratāpayet |

Leaf 25 ends: dhanyam āyuşyam ājyasya valapattitanāśanam | śuṃṭhīkaṃḍaḥ | atha śūlasya | sadyo bhavaṃ hareṃ chalaṃ lavaṇaṃ cāranālakaṃ | ghṛtena saiṃdhavaṃ cātha uṣṇaṃ jale suvarccalaṃ | śaṃkhacūrnaṃ ca lavaṇaṃ [text breaks off]

Leaf 5 is in a different hand:

Leaf 5r begins: atha tālakaśuddhi | tālakam khamdaśah tvāsacūrne kāmjika kṣipet

Leaf 5v ends: marddayitvā tato nīram grhnīyād bastrabālitam | dolāyamtre[text breaks off].

Shelved at d.716(10). Library foliation: 239-256.

Rasapaddhati / Śrībindu. - AD 1664

leaves 22, 55-70, 80: paper. — In Sanskrit. — Formerly property of Mangalananda Caturveda. — Date of copying: 5 kṛṣṇapakṣa of Māgha, saṃ 1720. — Devanāgarī script.

Shelved at c.308(5). Library foliation: 115b-132b.

Rasapradīpa

[With] Hindī Tīkā

leaves 1-5, 10-12, 14-21: paper. — In Sanskrit and Hindī. — Marginal initials: rasaḥ. — Devanāgarī script.

Begins: [...] śrīmanmukumdacaranau natvā toṣāpattadbhiṣajām kriyate rasapradīpo yam dakulamirāpahaḥ śreṣṭhaḥ

Leaf 3r has: iti jvarādişud sarveşu rogeşu mahāmṛtyumijayo rasaḥ |

Leaf 3v has: atha navajvare laghumṛtyu[m]jayo rasaḥ | [...] atha aparo mṛtyumijayo rasaḥ

Leaf 4v has: atha navajvare rasāmṛtaṃ |

Leaf 5r has: atha navajvare udakamamjarī rasaḥ

Leaf 5v has: atha san[n]ipāte rasaḥ | [...] iti paṃcavaktro rasaḥ saṃnipāte | atha sannipāte agnikumāro rasaḥ |

Leaf 10v has: iti bhūtabhairavaḥ śītajvare

Leaf 11r has: iti dvitīyo bhūtabhairavarasaḥ | iti nirāme vişamajvare rasaḥ | atha jīrṇajvare rasaḥ |

Leaf 12r has: atha jīrņajvare pamcāmrtaparpatī rasaḥ |

Leaf 12v has: iti pamcāmrtaparpathī rasah |

Leaf 14v has: atha jīrņajvare trtīyo mālinīvasamtah

Leaf 15r has: iti jīrņajvarādau mālinīvasamtorasah | iti navajvaranirāmajvarajīrnajvarānām cikitsā samāptā | athātīsāragraharāyoś cikitsā |

Leaf 16v has: iti samgrahanīrogacikitsā | athārśarogacikitsā

Leaf 19v has: atha vihghāpatimiśrānusāreņa raktārśaḥ pitārśo cikitsā |

Leaf 21r has: ity arśorogācikitsā | athājīrṇāgnimāṃghādīnāṃ cikitsā | tatrādau rasasya śodhanan ucyate | [...] iti mardanākhyasaṃskāreṇa pāradaśuddhiḥ | atha pāradasya kṣudutpannārthamukhakaraṇārthaṃ papsapsed ārtha ca auṣadham āha |

Ends: pratiyāmārdhakamkūppām chiplādīrgham tṛṇam daṭam | samdhasya tena kartavyā jīrṇājīrṇa ca ni [text breaks off].

Shelved at d.723(3). Library foliation: 9-24.

Rasarājašamkara / Rāmakṛṣṇa

leaves 1-3, 5-21, 33, 36-47, 50, 51: paper: 5 ill. — In Sanskrit. — Called the Rasasāraśaṃkara on leaf 11v. — The author was the son of Mudgala. — Line drawings of alchemical apparatus on folios 68r, 68v, 69r, 71v, 72r. — Devanāgarī script.

Shelved at e.139(2). Library foliation: 64-98.

Rasaratna / Śrīnātha

leaves 1-20: paper. — In Sanskrit. — Devanāgarī script.

Begins, leaf 1v: [...] atha nāgasya samjam janam eva yuktyā yogair anekaiḥ

Leaf 20v ends: dalamatimalahīnam vārttikānām sukhārtham iti śrīnāthaviracite rasaratne vamgastambhanādidalanirmalāmtam nāma şaṣṭopadeśaḥ aho vicitram rasakam ssena kharakṣidaḥ palla[text breaks off].

Shelved at d.734(4). Library foliation: 84-103.

Rasaratnadīpaka / Rāma

leaves 2, 4-35: paper. — In Sanskrit. — Bibliography: cf. CC 2.116a, 220a; Alwar 1663, extr.425. — The colophon makes the author a son of Ratna and servant of Sādhāraṇa; he is usually thought to have been the son of Annapāla. — Devanāgarī script.

Shelved at d.716(9). Library foliation: 205-237.

Rasaratnākara / Nityanātha Siddha. — AD 1718

leaves 2-32: paper. — In Sanskrit. — Date of copying: 13 śuklapakṣa of Śrāvaṇa, saṃ 1775. — Cursive Nāgarī script.

Leaves 27r-28r have 37 lines of a dialogue between Pārvatī and Iśvara, called Semuṇīgaccharaguṇaḥ; Leaves 29r-30r have 28 lines beginning: [...] atha cakrasya bījam aṃkam āha.

Shelved at f.88. Library foliation: 3-34.

Rasendrakalpadruma / Rāmakṛṣṇabhaṭṭa

leaves 1-27: paper. — In Sanskrit. — Devanāgarī script.

Shelved at c.308(2). Library foliation: 15-41.

Rugviniścaya / Mādhava

leaves 1, 2, 4-83, 85-135, 137-149, 151-154: paper. — In Sanskrit. — Marginal and interlinear glosses throughout. — Leaves 153, 154 torn. — Devanāgarī script.

Shelved at d.720. Library foliation: 3-150.

Rugviniścaya / Mādhava

leaves 1-62, 64-72: paper. — In Sanskrit. — Devanāgarī script.

Shelved at d.727(2). Library foliation: 31-101.

Rugviniścaya / Mādhava

65 leaves: paper. — In Sanskrit. — Date of copying: XVI cent. — Jaina style Devanāgarī script. — Pṛṣṭhamātrā vowels.

Shelved at d.733(1). Library foliation: 3-67.

Rugviniścaya / Mādhava

leaves [1], 2, [3]: paper. — In Sanskrit. — Covers jvaranidāna only. In the same hand as d.730(7b), i.e. 17th century, with which it has been confused. — Devanāgarī script.

Shelved at d.730(7a). Library foliation: 121-22, 131.

Rugviniścaya / Mādhava. — AD 1850

leaves 3-147: paper. — In Sanskrit. — Copied by Nandadāsagujarātī. — Date of copying: 6 śuklapakṣa of Āṣāḍha, saṃ 1907. — Copied in Kāśī. — Two hands: leaves 1-45, and 46-end (larger). — Interlineat gloss to leaf 52r and from 100r to end. — Jaina style Devanāgarī script.

Shelved at d.714(1). Library foliation: 3-147.

Rugviniścaya / Mādhava

[With] Ātaṅkadarpaṇa / Vaidyavācaspati

leaves 53, 147-[1]83: paper. — În Sanskrit. — Formerly property of Țhākuradāsa. — Devanāgarī script. — Tripāṭha layout.

Shelved at c.307. Library foliation: 3-40.

Rugviniścaya / Mādhava

[With] Atankadarpana / Vācaspati

leaves 1-4, [5, 6], 7, [8], 9-18, 23, 24, [2?, 2?], 27, [2?], 26, 29, [3?], [1?], 31-34, [3?], 36-52, [5?], 53, 55, 56, [5?], 58-60, [6?], 64-66, [61, 6?], 67, 68, [??], 70, [??], 72, [73], 74, [??], 76-80, 83, 84, [??], 81, 89, [??], [9?], [9?], [8?], 89, [9?], 90, [9?, 8?, 9?, 9?], 99-123, [124]: paper. — The left part of every leaf except leaf 123 is torn, making collation hard. Each leaf must be checked against an edition to ascertain the correct sequence. — In Sanskrit. — Bibliography: on commentary see NCC 2.43a; Meulenbeld, MN 26f. — Devanāgarī script.

Shelved at d.731. Library foliation: 3-125.

Rugviniścaya / Mādhava

[With] Ātankadarpaṇa / Vācaspati

233 leaves: paper. — In Sanskrit. — Bibliography: on commentary see NCC 2.43a; Meulenbeld, MN 26f. — Foliation: 1 leaf, leaves 1-24, 27-40, 42-44, 56-97, 120-124, 127-148, 150-194, 198-214, 217-219, 222-275, [276]. — Jaina style Devanāgarī script.

Shelved at d.732. Library foliation: 3-235.

Rugviniścaya / Mādhava

[With] Mādhavanidānasubodhinī / Jñānameru

1 leaf, leaves 5, 10, 6 leaves, leaves 14-26: paper. — In Sanskrit and Bhāṣā. — Jñānameru was a pupil of Mahimasundaragaṇi, pupil of Sādhukīrttyupādhyāya, of the Kharataragaccha. — Bibliography: Meulenbeld, MN. Jñānameru is not in NCC; see ABC 24, 1002 for a Gujarātī work by Jñānameru. — Leaf 160 torn. — Jaina Nāgarī script.

Shelved at d.714(2). Library foliation: 149-170.

Rugviniścayasamāsa / Mādhava

[With] Hindī commentary

leaves 87, 103-119, 189, 192-202,[20]3, 204-234,[235]: paper. — In Sanskrit. — Leaves 205-219 are written on verso only; on recto of these leaves is a jyotişa work with tables etc. — Devanāgarī script. — Tripāṭha layout from leaf 196v.

Leaf 87v starts: purīṣakā mārga choṭā ho jayā vadekaṣṭase [...] | 52 | tathā ca | śakṛnmūnmūtre samāyukte dhaute pāne śiśor bhavet |

Leaf 103r begins: [tear] nī ce ace gaḍahāme paḍakoṭe chā ho [...] | 73 | vātena gulphamā 'śrisatamāhuvatikaṃṭakaṃ |

Leaf 234, mūla, ends: | 58 | iti vişanidānam | jvarātisārograhaņī arśo [...] | 1 |

Leaf 234, comm., ends: iti visanidānam atha rogasamkhyām āha | atha jvarātisāraspaṣṭam

Leaf [235]r ends: iti śrīvaidyamādhavaviracito rugviniścaya samā samāpta ślokaḥ 1766.

Shelved at c.305(6). Library foliation: 160-222.

Rugviniścayaţippaņī

leaves 1-98: machine made paper. — In Sanskrit. — Page, side and line references to another MS given throughout. — Devanāgarī script.

Shelved at d.714(3). Library foliation: 172-269.

Sādhyāsādhyaparīkṣā

leaves 1-6: paper. — In Sanskrit. — Complete. — Devanāgarī script.

Begins, leaf 1v: [...] śivam harim vidhātāram tatpatnīm tatsutān ganān | natvā samastapratyūhaśāmtaye mamgalāya ca | 1 | annado jaladaś caiva āturasya cikitsakah | trayas te svargam āyāmti vinā yajñena bhārata | 2

Ends, leaf 6v: sādhyo rogī bhavati viyatam vaidyabhaişajyayogah | 10 | iti kā [text ends].

Shelved at d.716(3). Library foliation: 75-80.

Sadvaidyakaustubha / Janārdana. — AD 1830

leaves 1-20: blue machine made paper. — In Sanskrit. — Copied by Rāmadīkşitaśarman. — Date of copying: 8 kṛṣṇapakṣa of saṃ 1887 (apparently not śaka, nor the year called Krodha). — Bibliography: NCC 7.151b. — Covers the first ratna only. — Devanāgarī script.

Shelved at d.742(5). Library foliation: 105-124.

Sannipātacandrikā. — AD 1860

leaves 1-16, [17]: paper. — In Sanskrit. — This seems to be the same work as the Sannipātakalikā from the Aśvinīkumārasaṃhitā. — Copied by Gopa. — Date of copying: Friday pūrnimā śuklapakṣa of Caitra, saṃ 1917. — Left of MS torn. — Untutored Devanāgarī script. — Leaf 1r has a floral border.

Begins, leaf 1v: [...] atha samnipātacandrikā prā[tear]roga{sta}śaritvanipunau visvapramodapriyau bhāktīpradvasukarau ghasevitapadau trai[tear]vyaṣṭāvidausphurtisvastividhāyanau smitarucā vaidyotitesāmukhau

Ends, leaf [17]r: iti śrīsaṃnipātacaṃdrikā śamaptaṃ [...]cyaitre māśe 'site pakṣe paurṇamāyāṃ śukrvāsare gopasya hastena samāpto saṃnipātacaṃdrikā śrī saṃvat 1917 caitra śūkla 130 śūkravāre [...] 1234567891011 |

Shelved at d.734(2). Library foliation: 40-56.

Sannipātakalikā

leaves 1-7, 9, 3 leaves: paper. — In Sanskrit. — Attributed to Aśvinīkumāra, i.e. from the Aśvinīkumārasaṃhitā. — Bibliography: Meulenbeld, MN 391, etc. — Leaf 9 and the three following leaves are in different hands, but continuous. — Devanāgarī script.

Shelved at d.730(10). Library foliation: 158-168.

Sannipātakalikā. — AD 1727

leaves 1-12: paper. — In Sanskrit. — Formerly property of Jagannātha. — Copied by Vāsudeva of the Visanagarā jñāti. — Date of copying: 8 śuklapakṣa of Vaiśākha, saṃ 1784. — Copied in Kāśī. — Bibliography: On the scribe's jñāti see J.N. Bhattacharya, *Hindu castes and Tribes*, 1896, p.76. — This MS shares verses near beginning and end with d.713(1), and is therefore probably the same as the work attributed to the Aśvinīkumārasaṃhitā. — Devanāgarī script.

Shelved at d.725(4). Library foliation: 88-99.

Sannipātakalikā. — AD 1886

leaves 1-10: paper. — In Sanskrit. — Called the 13th chapter of the Aśvinīkumārasaṃhitā. — Date of copying: saṃ 1943(?). — Bibliography: cf. CC 1.694; NCC 1.441; Meulenbeld, MN 391. — Complete in 104 verses. — Devanāgarī script.

Shelved at d.713(1). Library foliation: 3-12a.

Sannipātakalikā / Kaideva

leaves 2-13: paper. — In Sanskrit. — Bibliography: cf. NCC 5.42b. — Devanāgarī script.

Leaf 12^br starts: ḍalīsomā chinnā chinnodbhavāmṛtā | madhuparṇī chinnaruhā vayasthā cakra-lakṣaṇā | candrahātāmṛtalatā dhārā vatsādanīvarā |

Leaf 13v ends: yojayen mākşikakşaudre tayor anyadalāmataḥ | madhumaṃḍaḥ purāṇo titīkṣṇo rukṣo laghus tanuḥ | vivarjji [text ends, in a different hand:] kaideva — 13.

Shelved at d.713(2). Library foliation: 12b-23.

Sannipātārņava

[With] Sannipātapadacandrikā / Māṇikya

leaves: paper. — In Sanskrit. — The mūla and its relationship to the Aśvinīkumārasaṃhitā must be investigated. — The author is the son of Padmanābha. — Bibliography: Meulenbeld, MN 391 etc. — Tripāṭha layout. — Complete. — Devanāgarī script.

Mūla begins leaf 1v: amlasnigdhosņatīksņaih kaţumadhurasurātāpasevākasāyaih

Vṛtti begins: [...] vatvā vaidyapatim dṛṣṭvā sannipātārṇavavarṇaca | sanidānacikitsasya vyākhyānam kriyate mayā | 1 | amleti

Ends, leaf 15v: sāmdhiyugmam

țippaṇam samnipātordhvair mānikyena krtam khalu |

padmanābhātmajenaişā nāmatah padacamdrikā |

iti śrīsamnipātapadacamdrikāyām samnipātārņavah samāptah

Shelved at c.305(5). Library foliation: 144-158.

Sārasamuccaya / Kalhaņa

leaves [1], 2-5, [7], 9, 2 leaves, [13], 14: paper. — In Sanskrit. — The author is the son of Bilhaṇa. — Bibliography: CC 1.714a; NCC 3.263b. — On farriery. — Jaina style Devanāgarī script. — Some pṛṣṭhamātrā vowels.

Shelved at d.730(4). Library foliation: 45-55.

Sārasangraha / Gaņeśa Bhişak

leaves 1-11: paper. — In Sanskrit. — Marginal initials: sā. sam. — Bibliography: cf. CC 1.143b, NCC 5.279a (Ganesa Bhişak). — Devanāgarī script.

Shelved at d.724(1a). Library foliation: 3-13.

Sārasangraha / Gaņeśa Bhişak

leaves 2-11, 14: paper. — In Sanskrit. — Gaņeśa is son of Hari Bhiṣak, son of Kṛṣṇa. — Bibliography: NCC 5.279a; ABC 191(6).610. — The Śabdamālā by the same author (ABC 191(6).610) says that his father was lord of Dvārakā, and a member of the Śrīvatsa anvaya. — Devanāgarī script.

Shelved at d.724(1b). Library foliation: 14-24.

Sārasangraha / Gaņeśa Bhişak

leaves [1], 2: paper. — In Sanskrit. — Bibliography: cf. d.724(1b). — Devanāgarī script. Shelved at d.724(1d). Library foliation: 30-31.

[Sārasaṅgraha] | [Gaņeśa Bhişak]

leaves 10-21: paper. — In Sanskrit. — Title assigned from similarity of verses. — Bibliography: cf. d.724(1b). — 2 verses on leaf 10r = verses 54, 55 on d.724(1b), leaf 4r (libr. fol. 16r); another = verse 57 on d.724(1a), leaf 7v (libr. fol. 9v). — Devanāgarī script.

Shelved at d.724(1g). Library foliation: 45-56.

[Sārasaṅgrahamūla]

leaves 6, 7, 10, 11: paper. — In Sanskrit. — Title from marginal initials: sā. ra. mū. — Devanāgarī script.

Shelved at d.724(1k). Library foliation: 80-83.

[Sārasaṅgrahaṭīkā]

leaves 7-23: paper. — In Sanskrit. — Title from marginal initials: sā. ra. ṭī. — Devanāgarī script. Shelved at d.724(1j). Library foliation: 63-79.

Śārngadharasamhitā / Śārngadhara

leaves [1], 4, 6-29, 38-93, 95-98, 107-111, [112, 113]: paper. — In Sanskrit. — Date of copying: an old MS. — Jaina style Devanāgarī script.

Shelved at d.712. Library foliation: 3-95.

Śārngadharasamhitā / Śārngadhara

leaves 1, 4-108, 111: paper. — In Sanskrit. — Formerly property of Ganesa Sudarsana. — Devanāgarī script.

Shelved at d.718(2). Library foliation: 78-184.

Śārngadharasamhitā / Śārngadhara

leaves 1, [3], 4, 6-17, 1a-69: paper. — In Sanskrit. — Bibliography: cf. Meulenbeld, MN 428f. — Devanāgarī script.

Shelved at d.718(1). Library foliation: 3-76.

Śārngadharasamhitā / Śārngadhara

leaves 1-103, 105-150: paper. — In Sanskrit. — Devanāgarī script.

Shelved at d.726(2). Library foliation: 22-151.

Śārngadharasamhitā / Śārngadhara

leaves 1-24, 24a-113, 121-139, kha, ga, gha: paper. — In Sanskrit. — Includes and index. — Devanāgarī script.

Shelved at d.728. Library foliation: 3-138.

Śārngadharasamhitā / Śārngadhara. — AD 1638

leaves 1-135, [136], 1 end leaf: paper. — In Sanskrit. — Date of copying: Wednesday 11 śuklapaksa of Phālguna, saṃ 1694. — Copied in Kaṭakagrāmāntara. — The MS seems to have been copied in Kaṭaka (Cuttack), in Utkala (Orissa), by a kāyastha who lived in Puri. — Devanāgarī script.

Shelved at d.719. Library foliation: 3-139.

Śārngadharasamhitā / Sārngadhara

[With] Śārngadharadīpikā / Āḍhamalla

leaves 6-33, 40, 41: paper. — In Sanskrit. — Devanāgarī script.

Shelved at c.305(1). Library foliation: 3-32.

Śirorogādhyāya

leaves 1-9: paper. — In Sanskrit. — Formerly property of Gopālajī. — Complete. — Jaina style Devanāgarī script.

Begins: devadārunatam kuştham naladam visvaleşajam | lepaḥ kāmjikasampistas tailayuktah sirorttinut |

Ends: kampedāhārdite kuryād vātavyādhikrto vidhih | iti śirorogādhyāyah.

Shelved at d.723(4). Library foliation: 26-34.

Strīgarbhaśūlacikitsā. — AD 1861

leaves 1-4: paper. — In Sanskrit. — Date of copying: samvat []18; probably 1918. — Complete. — Leaf 1r has 6 lines on pregnancy, month by month. — Devanāgarī script.

Begins, leaf 1v: [...] atha garbhini lakṣaṇam | niṣṭhīvikāṇau ravam maṃgasāhastam praharṣo hṛdayam vyathā ca |

Ends, leaf 4v: saivacalena samjuktām jonisūlanivāraņim | iti strigarbhaśūlacikitsā samāptah | nidāne | samvat []18 ţaţsāla |

Shelved at d.742(3). Library foliation: 80-83.

Suśrutasamhitā / Suśruta

leaves 1-27, 1a-28a: paper. — In Sanskrit. — Cikitsā and Nidāna chapters only. — Devanāgarī script. Shelved at c.310. Library foliation: 3-57.

Triśatī / Sārngadhara. — AD 1673

leaves 1-14(=15), 16-38, 1 leaf: paper. — In Sanskrit. — Also known as Vaidyavallabha. — The author was the son of Vaikumthāśrama, a yativara, and was called Rāula. - Formerly property of Viśvanātha(?). — Date of copying: sam 1730. — Copied in Kāśī(?). — Bibliography: CC 1.613a, 643b; NCC 7.378a, 8.269a; cf. IO 2713. — Complete. — Devanāgarī script.

Shelved at d.727(3). Library foliation: 103-139.

Vaidyabhāskarodaya / Dhanvantari

leaves 1, 3-15: machine made paper. — In Sanskrit. — Bibliography: NCC 9.228b. — Watermark (see leaves 5, 6, 14): Smith & All-Nutt. - Devanāgarī script.

Shelved at d.713(8). Library foliation: 91-104.

Vaidyabhāskarodaya / Dhanvantari

leaves 1-25: paper. — In Sanskrit. — Bibliography: NCC 9.228b. — Complete in 15 paricchedas. The Jammu MS (Stein, p.190) has 22 paricchedas. — Devanāgarī script.

Shelved at d.735(3). Library foliation: 38-62.

Vaidyahitopadeśa / Śrīkanthaśambhu

leaf 1: paper. — In Sanskrit. — Bibliography: CC 1.613b; 2.146b, 227b. — Covers verses 1-6. — Bound with the Dravyagunaśataśloki of Trimalla Bhatta (q.v.). — Devanāgari script.

Shelved at d.735(5). Library foliation: 103.

Vaidyajīvana / Lolimbarāja

leaves 1-35: paper. — In Sanskrit. — Copied by Jagannātha, an udīcya brāhmaṇa. — Date of copying: Sunday 8 śuklapakşa of Aśvina, sam 189(?); the date on leaf 1r gives AD 1886 7. — Devanāgarī script. Shelved at d.717(1). Library foliation: 3-37.

Vaidyajīvana / Lolimbarāja

leaves 1-19: paper. — In Sanskrit. — Copied by Sītārāma(?). — Devanāgarī script. Shelved at d.723(8). Library foliation: 82-100.

Vaidyajīvana / Lolimbarāja

leaves 1-20: paper. — In Sanskrit. — Devanāgarī script.

Shelved at d.730(8). Library foliation: 133-152.

Vaidyajīvana / Lolimbarāja. — AD 1655

leaves 3-10: paper. — In Sanskrit. — Copied by Nārāyaṇa's younger brother. — Date of copying: 4 (?) śuklapakşa of Pauşa, sam 1712. – Devanāgarī script.

Shelved at d.730(7). Library foliation: 123-130.

Vaidyajīvana / Lolimbarāja. — AD 1739

leaves 1-18: paper. — In Sanskrit. — Date of copying: Monday 9 kṛṣṇapakṣa of Mārgaśīrṣa, saṃ 1786. — Copied in Puruşottamakşetra. — Puruşottamakşetra is probably Puri. — Devanāgarī script. Shelved at e.140(1). Library foliation: 3-20.

Vaidyajīvana / Lolimbarāja. - AD 1780

leaves 2 (=1), 2-28: paper. — In Sanskrit. — Copied by Jayarāmabhaṭṭa, s.o. Govindabhaṭṭa. — Date of copying: Monday 5 kṛṣṇapakṣa of adhika Śrāvaṇa, śaka 1702. — Devanāgarī script. Shelved at d.717(2). Library foliation: 38-67.

Vaidyajīvana / Lolimbarāja. — AD 1794

leaves [1], 2-16: paper. - In Sanskrit. - Date of copying: Thursday 7 śuklapaksa of Kārttika, sam 1851. — Devanāgarī script.

Shelved at d.736. Library foliation: 3-18.

Vaidyajīvana / Lolimbarāja

[With] Dīpikā / Rudrabhatta

leaves 1-47: paper. — In Sanskrit. — Tripāṭha layout. — Complete. — Devanāgarī script. Shelved at d.716(1). Library foliation: 3-49.

Vaidyajīvana / Lolimbarāja

[With] Dīpikā / Rudrabhatta

leaves 1-12, 14-28, 28a-72: paper. — In Sanskrit. — See Gambier Parry's note about foliation on libr. fol. 267. — Devanāgarī script.

Shelved at d.726(5). Library foliation: 194-256.

Vaidyajīvana / Lolimbarāja

[With] Dīpikā / Rudrabhaṭṭa

leaves 1-69: paper. — In Sanskrit. — Copied by Jīvānanda. — Tripāṭha layout. — Complete. — Devanāgarī script.

Shelved at d.737. Library foliation: 3-71.

Vaidyajīvana / Lolimbarāja. — AD 1804

[With] Dīpikā / Rudrabhaṭṭa

leaves 1-34: paper. — In Sanskrit. — Formerly property of Durllabharāma, s.o. Laksmaṇa, p.o. Harikṛṣṇa. — Copied by Śaṅkara. — Date of copying: Saturday 2 kṛṣṇapakṣa of Kārttika, saṃ 1861. — Tripātha layout. — Complete. — Devanāgarī script.

Shelved at c.305(2). Library foliation: 34-68.

[Vaidyaka work]

leaves [4], 5, 6, 3, 6a: paper. — In Sanskrit. — No marginal initials. — May have d.724(1f) as an initial leaf. — The leaves cover the following verses: [4] — vv.37-53; 5 — vv.54-71; 6 — vv.72-91; 3 — vv.15-36; 6a — vv.44-62. — The correct reading sequence is thus 3-6, with 6a belonging elsewhere. — Devanāgarī script.

Shelved at d.724(1c). Library foliation: 25-29.

[Vaidyaka work]

1 leaf, leaves 25, 26, [27], 28, [29], 30, 31, [32], 33-35: paper. — In Sanskrit. — Marginal initials: śru. sā.; may be related to the Sārasaṅgraha by Gaṇeśa Bhiṣak (q.v.). — Devanāgarī script.

Shelved at d.724(1e). Library foliation: 32-43.

[Vaidyaka work]

leaf 2: paper. — In Sanskrit. — Marginal initials: ga. ni. — Covers verses 1-14, and is therefore probably part of d.724(1c). — Devanāgarī script.

Shelved at d.724(1f). Library foliation: 44.

[Vaidyaka work]

leaf 18: paper. — In Sanskrit. — In same hand as d.724(1h), Padārthabodha. — Devanāgarī script. Shelved at d.724(1i). Library foliation: 62.

[Vaidyaka work]

1 leaf: paper. — In Sanskrit. — Has verses 83-91 of a work on the philosophy of medicine and sātmya. — Devanāgarī script.

Shelved at d.724(11). Library foliation: 84.

Vaidyakasārasangraha

leaves [1], 2-24: paper. — In Sanskrit. — Cf. MS d.727(6). — Marginal initials: vai. da. — Complete. The opening verses of this work are the same as opening verses 14 and 15 of Harşakīrti's Yogacintāmaṇi (see p.3 of 1909 ed.). — Devanāgarī script.

Shelved at d.713(5). Library foliation: 48-72.

[Vaidyakasārasangraha]. — AD 1787

leaves 1-24: paper. — In Sanskrit. — Title in colophon and likhyate phrase: Yogasangraha. — Title assigned from similarity to MS d.713(5). — Date of copying: suklapakṣa of Rādha (Vaiśākha) saṃ 1844, saka 1709. — Complete. Begins as Harṣakīrti's Yogacintāmaṇi, verses 14 ff. May be a version of this work. — Devanāgarī script.

Shelved at d.727(6). Library foliation: 187-210.

Vaidyāmṛta / Moreśvarabhatta

leaves 1-4: paper. — In Sanskrit. — Covers up to verse 50. — Devanāgarī script.

Shelved at d.723(8b). Library foliation: 101-104.

Vaidyāmṛta / Moreśvarabhaṭṭa. — AD 1819

leaves 1-12, [13], 14-19: paper. — In Sanskrit. — Copied by Lakşmaṇa. — Date of copying: in the kṛṣṇapakṣa of Jyeṣṭha, saṃ 1876. — Copied in Kāśīsamīpe. — Moreśvara's father Māṇikya lived at Mohaṃmadānagara (Kalpī?). — Leaf 1r has 3 lines on aśvagandha etc. — Devanāgarī script.

Shelved at d.735(8). Library foliation: 172-190.

Vaidyāmṛta / Moreśvarabhaṭṭa. — AD 1834

leaves 1, 3-24: paper. — In Sanskrit. — Copied by Premalāla. — Date of copying: Monday 2 kṛṣṇapakṣa of Phalguna, saṃ 1890. — Copied in Viruṭa(?). — Complete. — Devanāgarī script.

Shelved at d.725(2). Library foliation: 54-77.

Vaidyāmṛta / Moreśvarabhatṭa. — AD 1838

leaves 1-15: paper. — In Sanskrit. — Composed in śaka 1603, called Durmati, i.e. 1681. — Date of copying: sam 1895. — Devanāgarī script.

Shelved at d.727(5). Library foliation: 171-185.

[Vaidyasāramañjarī]

leaves 1-60: paper. — In Sanskrit and Bhāṣā. — Title from note on leaf 1r. — Devanāgarī script.

Leaf 1r, in 3 columns, has: vaidyasāramañjarī

Begins, leaf 1v: [...] karasyamgulamüleyām akathyate nāḍī karāmgule spṛpte nāḍī dākṣine yunu nāḍī dṛśyate

Leaf 2v has: 18 nādījñānam atha nādījñānatīkā

Leaf 8v has: atha mutraparikşyā tailam kşipet |

Leaf 10v has: 49 iti laghvīparīkṣakālajñānasmāptam atha kālajñāna caitanyam sakalam yasyam Leaf 12v has: śrīvaidyama | norathanāma nāḍīparikṣā vātapittaśubhanidānasya 6 sādhyāsādhyalakṣa-

ņamūtraparikṣāparibhāṣā saṃraptatakālacakra prathamam udesa | atha muṃḍikalpa |;

The text lapses more and more into bhāṣā, giving mainly recipes.

Shelved at e.139(1). Library foliation: 3-62.

Vaidyasārasaṅgraha

leaves 1-14: paper. — In Sanskrit and Hindī. — Devanāgarī script.

Begins, leaf 1v: [...] atha vaidyasaṃgrahaḥ | lauhatāmrarāgatīnī śodhanakā ekair iṣi hai. tailatakragomutramahasaptavāra punaḥ punaḥ |

Leaf 163v has: iti śrīmādhavanidānavāgbhaṭaca[ra]kaśuśruṣe māyā viracita kaiyaṭasārasaṃgrahaḥ samāptaḥ śubham [followed by 6 lines in Hindī].

Shelved at d.716(6). Library foliation: 150-163.

Vaidyasarvasvasangraha / Rāmeśvara

leaves 1-38: paper. — In Sanskrit. — Marginal initials: sā. sa. or vai sam. — Mainly alchemical, with many quotations. — Devanāgarī script.

Leaf 1r has: [tear] sārasamgrahagramthaprārambhah |

Leaf 1v starts: [...] praņamya śaṃbhoś caraṇāraviṃdaṃ rāmeśvareṇātha guropadāvuṃ | pramathya vaidyārṇavam eşa buddhyā

viracyate vaidyahitāya samgrahah |

Leaf 23r has: iti śrīmadrāmeśvarokte smin vaidyasarvasvasamgrahe |;

Text breaks off on leaf 38v.

Shelved at d.735(6). Library foliation: 121-158.

Vaidyavallabha / Hastiruci

leaves 1-18: paper. — In Sanskrit. — Complete in 49 verses. — Devanāgarī script.

Shelved at d.726(1). Library foliation: 3-20.

Vaidyavallabha / Hastiruci

leaves 1-27: paper. — In Sanskrit. — Complete in 54 verses. — Devanāgarī script.

Shelved at d.727(1). Library foliation: 3-29.

Vaidyavallabha / Hastiruci. - AD 1779

leaves 2-9: paper. — In Sanskrit. — Copied by Stambakeśvarabhatta. — Date of copying: Friday(?) 5 śuklapakşa of Māgha, sam 1835. — Covers verses 24-211. — Devanāgarī script.

Shelved at d.725(3). Library foliation: 79-86.

Vaidyavallabha / Hastiruci. — AD 1809

24 leaves: paper. — In Sanskrit and Bhāṣā. — With interlinear glosses in red ink, in Bhāṣā. — Copied by Dulabharāma, a nāgara brāhmaṇa. — Date of copying: Sunday 8 śuklapakṣa of Bhādrapada, saṃ 1866. — Devanāgarī script.

Shelved at d.723(5). Library foliation: 36-59.

Vaidyavilāsa / Gopāladāsa

leaves 119, 125-129, 148, 164-166, 17[1], 1 leaf (libr.fol.14), leaves 229, 231-235, 238-246, 248-249, 251-269, 278, 283: paper. — In Sanskrit. — Gopāla was a kāyastha, and son of Balabhadra. — Bibliography: NCC 6.142a (only one other MS of this work noted: Bikaner 1428, dated 1669). — Devanāgarī script. Shelved at d.725(1). Library foliation: 3-52.

Vaidyavinoda / Śańkarabhatta

98 leaves: paper. — In Sanskrit. — Bibliography: cf. CC 1.613a etc. — Badly worm eaten. — Foliation as follows: leaves 2-25, [26], 27-37, [38], 39-53, [55], 56-64, [65], 66-87, 89(no lacuna)-101. — Devanāgarī script.

Shelved at d.722. Library foliation: 3-100.

Vijnānānandakarī / Prayāgadatta

leaves 1-50: paper. — In Sanskrit. — Gives pratīkas only from the mūla, Lolimbarāja's Vaidyajīvana. — Formerly property of Mālavīya Raghunātha. — Copied by Rāmanātha. — Bibliography: CC 1.611a, 2.146a. — Leaves 1-3r have an introductory ākhyāyikā on the history of the commentator's family; first pratīka on leaf 3v, line 2. — Devanāgarī script.

Shelved at c.309. Library foliation: 3-52.

Yogacintāmaņi / Harşakīrti

leaves 1-15: paper. — In Sanskrit and Bhāṣā. — Published edition(s) of work: Kalyāṇa 1909. — Covers adhyāya 4 of 1909 ed. Copied by the same scribe as d.724(3) etc. — With interlinear gloss in Bhāṣā. — Devanāgarī script.

Shelved at d.724(2). Library foliation: 86-100.

Yogacintāmaņi / Harşakīrti

leaves 1-13: paper. — In Sanskrit and Bhāṣā. — Published edition(s) of work: Kalyāṇa 1909. — Covers adhyāya 6 of the 1909 ed. The MS was copied by the same scribe as d.724(3) etc. — With interlinear gloss in Bhāṣā. — Devanāgarī script.

Shelved at d.724(4). Library foliation: 127-139.

Yogacintāmaņi / Harṣakīrti

leaves 1-4, 7, 8: paper. — In Sanskrit and Bhāṣā. — Published edition(s) of work: Kalyāṇa 1909. — Covers adhyāya 5 of 1909 ed. Copied by the same scribe as d.724(3) etc. — With interlinear gloss in Bhāṣā. — Devanāgarī script.

Shelved at d.724(6). Library foliation: 164-169.

Yogacintāmaņi / Harşakīrti

leaves 1-24: paper. — In Sanskrit and Bhāṣā. — Copied by Bālakṛṣṇa Pāṭhaka. — Published edition(s) of work: Kalyāṇa 1909. — Covers adhyāya 3 of 1909 ed. Bālakṛṣṇa also copied d.724(3). — With interlinear gloss in Bhāṣā. — Devanāgarī script.

Shelved at d.724(7). Library foliation: 171-194.

Yogacintāmaņi / Harṣakīrti

leaves 1-33: paper. — In Sanskrit and Bhāṣā. — Published edition(s) of work: Kalyāṇa 1909. — Begins as 1909 ed., verse 1. — With interlinear gloss in Bhāṣā. — Jaina Nāgarī script.

Shelved at d.727(8). Library foliation: 220-252.

Yogacintāmaņi / Harşakīrti

leaves 2-19, 22-44, 46-56, 56a-62: paper. — In Sanskrit. — Called just Vaidyasāroddhāra in chapter colophons. — Author was a member of the Nāgapurīyatapāgaccha. — Published edition(s) of work: Bombay 1909. — Bibliography: CC 1.613b, 763b, 2.146a, 3.102b (sub Yogacintāmaṇi); cf.Jolly,IM 4. — The opening verse of this MS is chapter 1, verse 33 (p.27) of the 1909 edition. — Devanāgarī script.

Shelved at e.138. Library foliation: 3-61.

Yogacintāmaņi / Harşakīrti. — AD 1861

leaves 1-24: paper. — In Sanskrit and Bhāṣā. — Copied by Bālakṛṣṇapādaka. — Date of copying: 15 śuklapakṣa of Mārgaśīrṣa, saṃ 1918. — Published edition(s) of work: Kalyāṇa 1909. — Adhyāya 2 of 1909 ed. The same scribe copied MSS d.724(2), (4), (5), (6), and (7). — With interlinear gloss in Bhāṣā. — Devanāgarī script.

Shelved at d.724(3). Library foliation: 102-125.

Yogacintāmaņi / Harşakīrti. — AD 1861

leaves 1-22: paper. — In Sanskrit and Bhāṣā. — Date of copying: saṃ 1918. — Covers adhyāya 1 of the 1909 ed. Copied by the same scribe as d.724(3). — With interlinear gloss in Bhāṣā. — Devanāgarī script.

Shelved at d.724(5). Library foliation: 141-162.

Yogacintāmaņi / Harşakīrti

[With] Tīkā

leaves 1-17: paper. — In Sanskrit and Bhāṣā. — Marginal initials: sārasaṃgra; yogasāra. — The Ṭīkā is in Bhāṣā. — Published edition(s) of work: Kalyāṇa 1909. — Begins as 1909 ed., verse 1. — Devanāgarī script.

Shelved at d.717(4). Library foliation: 110-126.

Yogakalpadruma

[With] Tikā

leaves 1-7: paper. — In Sanskrit. — Bibliography: The work listed under this title in CC 1.477a is on Yogaśāstra. — Covers verses 1-79. The Ṭīkā follows each verse. — Covers verses 1-79. — Devanāgarī script.

Begins, leaf 1r: [...] praņamyātibhaktyā sahasrārasaṃsthānagurūn śaṃbhurūpān dayālūn mayoktaḥ | ayaṃ yogakalpadrumo bhaktibhājān phalaty eva gurvājñayā nātra śaṃkā | 1 | śvetārkamūlaṃ

Leaf 7v ends: yāvad eşa paritişthate grhe tā[tear, text breaks off].

Shelved at d.727(7). Library foliation: 212-218.

Yogaratnamālāvivṛti / Guṇākara

leaves 1, 5-32: paper. — In Sanskrit. — Gives pratīkas only from Nāgārjuna's mūla. — Guṇākara's name from MS Oxf. Walker 206g (no.764). — Bibliography: CC 1.478a, 2.111a, 3.102b; extracts as Oxford MS Walker 206g (Aufrecht's Bodleian cat. no. 764). — Covers verses 1, 14-132. — Jaina style Devanāgarī script.

Begins, leaf 1v: [...] i gurucaraṇakamalam amalaṃ praṇamya nāgārjjunapraṇītāyāḥ | vivṛttiṃ sukhāvavuddhau vakṣye haṃ yogaratnamālāyā | 1 | iha ṇastrastrāraṃbhe ācāryanāgārjjunapādaśiṣṭa-samayapālanārthaṃ śāstrasopodeyatāvadarśayituṃ gurupādanatiṃ kurvvaṃta prathamāmārthāmāhuḥ | vimaleti | vimalā cāsau matiśvasauvakiraṇanikarod āptir yujas tena prabhinnāh | pratibodhitāḥ |

Leaf 32v ends: | [1]32 | atha jalasya takrīkaranam | pratyagreti | pratyayo navo yo[text breaks off].

Shelved at d.742(7). Library foliation: 135-163.

Yogasata / Amitaprabhā. — AD 1708

leaves [1], 2-5, [6]: paper. — In Sanskrit. — Copied by Apadeva of Devavāṭapura. — Date of copying: Sunday 10 śuklapakṣa of Pauṣa, saṃ 1765. — Copied in Kāśī. — Bibliography: CC 1.479a; NCC 1.344b (only 2 other MSS). These call Amitaprabha's work a comm. on Yogaśata. — Devanāgarī script.

Begins, leaf 1r: [... tear] dhāsnaś cikitsitā dvipra[tear] tasya dūraṃ | vidagdhavaidyapratipūjitasya kariṣyate yogaśatasya badha[tear] | parī[tear] nāmayalakṣaṇāni ciki[tear] tajñena cikitsakena |

Leaf [6]v has: | 111 | iti amitaprabhaviracitam yogaśatam sampūrnam samvat 1765 pausaśuddhadaśamyām ravau devavāṭapuravāsināpadevena kāśyām idam likhitam svārtham parārtham ca [followed by 5 verses].

Shelved at d.716(8). Library foliation: 198-203.

Yogaśataka. – AD 1527

leaves [5, 6], 7-14: paper. — In Sanskrit. — Does not mention Nāgārjuna | Vararuci. — Formerly property of Vaidya. — Copied by Rāula. — Date of copying: Wednesday 1 Jyeṣṭha, saṃ 1580 (irregular), śaka 1449. — Published edition(s) of work: Pondichéry 1979. — Covers verses 35-100. The last verse, 100, follows the variant readings of Filliozat's 1979 ed. of verse 100. — Devanāgarī script.

Ends, leaf 14r-14v: saptakāni śamāmnvitavyādhim udāharamti | iti śrīyogaśatam sampūrnnam | samvat 1580 varse śāke 1449 pravarttamāne uttarāyane | grasmānte mihanmagalyaprade | yestamāse | śuklapakse | 1 pratipattithau budhavāsare rāulanāmnā likhitam | vaidyanāmnapathanārtham | śrīguruprasādāt | [...].

Shelved at d.723(7). Library foliation: 71-80.

Yogaśataka, vrddha. — AD 1763

leaves 1-32, [33]: paper. — In Sanskrit. — This is a long version of the text. — Author's name (Nāgārjuna|Vararuci?) not given. — Formerly property of Lakṣmīrāma vaidya. — Copied by Devaśankara, s.o. Vyāsajaganadeva. — Date of copying: Friday 14|15 kṛṣṇapakṣa of Āṣāḍha, saṃ 1820, śaka 1685. — Copied in Vairāṭapura. — Complete in 363 verses. — Devanāgarī script.

Begins, leaf 1v: [...] kṛtsnasya taṃtrasya gṛhītadhāmnāś cikitsitād viprasṛtasya dūraṃ | vidagdhavaidyapratipūjitasya kariśyate yogaśatasya baṃdhaḥ | 1 |

Ends, leaf [33]r-[33]v: guṭikā vegavati nāmni sarvātisāranāśanī | [3]63 | ity āyurvedaśāstre vṛddhayogaśataṃ samāptaṃ | saṃvat 1820 | nārṣe śāke 1685 | pra. | āṣāḍhamāse kṛṣṇapakṣe caturthī anaṃtarapaṃcamyāṃ bhṛguvāsanvitāyāṃ saṃpūrṇaṃ likhito yaṃ [33v] vairāṭapuranivāsitaṃ vyāsajaganadevasūtadevaśaṃkaralikhito yaṃ graṃthaṃ paṭhanārthaṃ vaidyalakṣmīrāma | [...] yogaśata-vṛddhasaṃpūrṇaṃ |

Shelved at c.305(4). Library foliation: 110-142.

Yogasataka, vrddha

[With] Tīkā

leaves 1-20, 22-29: paper. — In Sanskrit. — Does not mention Nāgārjuna | Vararuci. — Published edition(s) of work: cf. Pondichéry 1979. — Covers verses 1-222, 239-323. — Devanāgarī script.

Begins, leaf 1v: [...] dhanvamtaraye haraye tamo rogān ekapayūtha haraye | dadhate kalaśam dadate mṛtapūrṇṇam jīvanam jaḍatām |

kṛtsnasya taṃtrasya gṛhītadhāmnāś

Leaf 29v ends: | [3]23 | guṇāṃdhikaṃ yogaśataṃ nibadhya prāptaṃ mayā puṇyam anuttamaṃ yat nānā prakārāmaya[text breaks off].

Shelved at d.727(4). Library foliation: 142-169.

Yogasudhānidhi / Vandimiśra

leaves 19-40, 42-51: paper; ill. — In Sanskrit. — Marginal initials: yo.su. (to leaf 42); śārṅg (to 47); yo.su. (to 51). — The author was the son of Jagadīśa. — Bibliography: CC 1.480a, 2.112a. — Devanāgarī script. — Yantras on leaves 24v, 35v, 49v.

Shelved at d.716(7). Library foliation: 165-196.

Yogasudhānidhi / Vandimiśra

leaves [1], 3 ll., leaves 5-11, 1 l., leaves 3-9, 21, 11: paper. — In Sanskrit. — Foliation is confused and obscured by bad repairs. — Jaina Nāgarī script.

Shelved at d.725(5a). Library foliation: 101-127.

Yogasudhānidhi / Vandimiśra

leaves 10-13: paper. — In Sanskrit. — Also called Yogoktyupadeśa. — Devanāgarī script. Shelved at d.725(5b). Library foliation: 128-131.

[Yogatarangiṇī] | [Trimalla Bhaṭṭa]

[With] Tīkā

leaves 1-36: paper. — In Sanskrit. — Title from IO 2505-2708. — The outer cover has the title Yogaśataka. — Marginal initials throughout: yo. — Copied by Gaņeśabhaṭṭa Kelakara (probably scribe of the exemplar). — Bibliography: cf. IO 2705-2708. — A work consiting chiefly of parts of other works. Title and author only tentatively assigned. — There are sections of the Yogaśataka (with a ṭīkā;), and of the Cikitsāsāra by Gopāladāsa. — Devanāgarī script.

Leaf 1r has: yogaśataka saţī vaidyakauśala | vaidika | 40

Begins, leaf 1v: [...] samāşaştir dvighnīmanujakarīņām pamca ca niśāhahyānām dvātrimśat kharakarabhayoh pamca ca kṛtiḥ

Ţīkā begins, leaf 3r: | 12 | ṭīkā triphalā | veņuvaṃśapatra |

Leaf 12v has: iti kāyacikitsā samāptā | Leaf 17r has: iti śālakyacikitsā samāptā |

Leaf 20v has: iti vişacikitsā |

Leaf 23r has: iti vālacikitsā |

Leaf 25v has: iti virecanam uktam |

Leaf 26v has: iti nasyavidhih |

Leaf 26v has: nānāprakāre mayanīḍabhūtaṃ kṛtsnaṃ jayaṃte na bhavetv arogaṃ | 135 | iti yogaśataṃ saṭippaṇaṃ samāptaṃ | śubhaṃ bhavatu | lekhana gaṇeśabhaṭa kelakara | paraṃ paropa-kārārtha[...] vaidyā{nāṃ} ya[leaf 27r]śadāyakaṃ | 1 | cikitsāsāranāmāyaṃ graṃthaṃ-paramadurlabhaḥ | śrīgopāladāsena kriyate paṃḍitaḥ priyaṃ | 2 | atha nāḍīparīkṣā | vāte vakrād [...]

Leaf 27r has: iti anuvāsanakriyā | evam pamcakarmāni samāsāni |

Leaf 28r has: atha mūtraparīkṣā | Leaf 28v has: atha kālajñānam | Leaf 29r has: atha ruturutuprakopa | Leaf 30r has: iti takradadhiguṇāḥ |

Leaf 30v has: iti navanītaguņā | [...] iti ghrtavargah | [...] iti madhuguņāh |

Leaf 31r has: iti gudukhamdasarkarāguņāh | [...] iti tilatailam [...] iti sārşapatailam |

Leaf 31v has: ity eramdatailam | Leaf 32v has: iti pathyavargah |

Leaf 33v has: iti jalavargah [...] iti kşīravargah |

Leaf 34r has: iti tailavargah [...] iti mudhugunāh | [...] atha recanam

Leaf 35r has: iti cikitsāsāre vaidyakauśalyam samāptam | atha rasopara{sa}śodhanamāranādhikārah |

Leaf 36v ends: | 1 | iti nāgamāraņavagaḥ | sārkapayastālalepaśuşkapaṭas tribhiḥ.

Shelved at d.734(1). Library foliation: 3-38.

Yogoktilīlāvatī / Sundaradeva. — AD 1833

leaves 29-35, [36], 37, 38: paper. — In Sanskrit. — Copied by Rāmaprasāda (or copied from his MS).

— Date of copying: Sunday in the kṛṣṇapakṣa of Jyeṣṭha, śaka 1755. — Bibliography: NCC 6.198b.

- Devanāgarī script.

Shelved at d.725(5d). Library foliation: 140-149.

Yogoktyupadeśāmṛta / Sundaradeva

leaves 30-37: paper. — In Sanskrit. — Probably the same as the Yogoktilīlāvatī. — The author was the son of Govindadeva. — Bibliography: NCC 6.198b. Other medical works of Sundaradeva are known, but not the present one. — Devanāgarī script.

Shelved at d.725(5c). Library foliation: 132-139.

Appendix II

Ayurvedic manuscripts in the Cambridge University Library

Aśvāyurveda / Jayadatta. - AD 1364

leaves 1-95, 1 leaf: palm leaf. — In Sanskrit. — Date of copying: Thursday 11 kṛṣṇapakṣa of Māgha, [Nepāla] samvat 484. — With wooden end boards. — With 1 extra leaf having 6.5 verses of Bhujmoli script, plus jottings with a later date. — Bhujmoli script. — With letter numerals.

Begins, leaf 1v: namaḥ sarvvajñāya |

pranamya śankaram bhaktyā śankaram sarvadehinam

śivāya jagatojatam śivankāpi viśesatah |

sū[kṣā?]vavodhaśavdārtham śucchavistaravarjitam |

lakşanam vājidehastham samkşepena yathākramam |

cikitsārtham samāsena siddhauşadhisamanvitam |

muniproktāni śāstrāņi samyagālākrvājināh |

śrīmadvijayadattasya putraņā kriyate dhunā |

śrīmatā jayadattena śabdānām hitam i[]ta |

Leaf 95r ends: tenātra nāvihitāyaka[]ābhiśankayā |

rasāyanakalpādhyāyaḥ | samāptā cedam aśvāyurvedaśāstram kṛtir iya[m] mahāśāntaś[r]ījayadattasya | samvat 484 māghakṛṣṇa [tear] yo 11 dasyām śravaṇanakṣatre vṛhaspativāsare likhitam idam pustakam | Shelved at Add 2832.

Carakasamhitā / Caraka

leaves 1-35, 37-46: paper. — In Sanskrit. — Jaina style Devanāgarī script.

Begins, leaf 1v: [...] asyāgre cikitsāsthānam asti tat pādau rasāyanam tamtram asti | athāto 'bhayāmalakīyam rasāyanapādam vyākhyā{syā}mah | iti ha smāhur ātreyādayo maharṣayah |

Leaf 44r has: agniveśakṛte taṃtre carakapratisaṃskṛte cikitsāsthāne caturtho dhyāya samāptah 4 || athāto gulmacikitsitaṃ vyākhyāsyāmaḥ

Ends, leaf 46v: yogān gulmanivarhaṇaṃ | tryūṣaṇaṃ triphalādhānyaṃ | bi [text breaks off]. Shelved at Add 2534.

Nyāyacandrikāpañjikā / Gayadāsa

leaves 2, 1 leaf, leaves 15-78: paper. — In Sanskrit. — Commentary on the Suśrutasaṃhitā. — Bibliography: Meulenbeld, MN 398-399; NCC 5.312a, 10.317a. — Published description: ZDMG 58(1904); JRAS (1906). — Jaina Nāgarī script.

Begins, leaf 2r: bhautikam kṛtam prānikāyam tasyedam hetusvalakṣaṇakāryovamtayāravyānam iti hetutvādibhir viśoṣair ga[tear]

Leaf 25r has: sauśrute śalyatamtro nyāyacamdrikāyām śukraśonitaśuddim śārīram dvitīyo dhyāyaḥ | 2 |

Leaf 33r has the end of adhyāya 3;

Leaf 45v has the end of garbhavyākaranam;

Leaf 56r has the end of pratyekamarmmavirdeśādhyāyaḥ;

Leaf 59v has: iti nyāyacamdrikāyām pamijikāyām śārīrasthāne śiravarnavibhaktiśārīram dhyāyah |

Leaf 66r has: iti [...] śirāvyādhavidhiśārīram

Leaf 71v has: iti [...] dhamanīvyākaraņam nāmaśārīram dhyāyah

Ends, leaf 78v: yad āha | atrāpi nīlavatpratīkāra iti | kālātīte [...] | tatrāpi salyī bhavan [text breaks off].

Shelved at Add 2491.

Rājamārttāņḍa

leaves 6-51: paper. — In Sanskrit. — This may be the work of Bhojadeva also known as Yogasārasaṅgraha. — Bibliography: cf. CC 1.502a, 2.220b for a work of this name on medicine by

Bhojadeva (extracts insufficient for identification.). — Covers verses 26-425. — Devanāgarī script.

Leaf 6r has: | 26 | śilākusumasauvīraniśāśyāmānvitaiḥ samaiḥ |

Leaf 7r has: | 35 | iti śrīrājamārttamde śirorogacikitsā samāptāh |

Leaf 12r has: iti netrarogacikitsā Leaf 16r has: iti mukharogacikitsā

Leaf 17v has: iti dramukharogacikitsā

Leaf 18v has: iti snanakarnādivrddhyadhikārah [...]

Leaf 53r has: | 398 | iti rasāyanādhikāraḥ

Leaf 55v has: | 415 | iti gomahişīņām adhikārah

Leaf 56v has: | 425 | tato marut śonitabheşajāni stambhasya corvoh śamanah prakārah.

Shelved at Add 2480.

Rasarāja / Matirāma. — AD 1745

1-17: paper. — In Hindī. — Copied by Rūparāma, s.o. Someśvara of the Motālā jñāti. — Date of copying: 11 śuklapakṣa of Pauṣa, saṃ 1802. — Complete. — Devanāgarī script.

Leaf 1r has 3 lines in Hindī;

Begins, leaf 1v: [...] hota nā

Ends, leaf 17r: iti śrī cimtāmanicaranakamalacamcarīkamatirāmaviracito rasarājah samāptim agamat | samvat satrahasaibaraṣūbīte ikunāsīti | pūsām 'sita ekādasī pothī liṣī surīti |

samvat 1802 varșe paușamāse site pakșe motālājñātīyasomeśvarātmajena rūparāmeņa likhito yam gramthah |

Shelved at Add 2503.

[Rasaśāstra text]

171 leaves: palm leaf. — In Sanskrit. — The text has the word 'pīṭhikā' frequently. Foliation very confused, and no chapter or other colophons. — Nepalese script.

Begins, leaf 2r: șu mā[]inas'anvavrktemna jaratiītagrāsena dive dive vațukam iti |

Ends, leaf [142]r: meţţā śrṅgīmrtapi[]vahalapu []ena a[] tohānāḥ pīţhikāstamtana uvatīti | Shelved at Add 1652.

Rasendracūḍāmaņi / Somadeva

leaves 1-3: paper. — In Sanskrit. — Covers the divyauşadhilakşana adhyāya only (verses 1-69). — Devanāgarī script.

Begins, leaf 1r: [...] mamthānamairavamahāgamasampradistā

Ends, leaf 3v: iti śrīsomadevaviracite rasemdracūdāmaņau divyau [şa] dhīlakṣaṇādhyāyaḥ samāptaḥ om tat sat hariḥ.

Shelved at Or 99.

Śālihotra / Nakula. — AD 1777

leaves 1-3, 5-37, 39: paper. — In Sanskrit. — Formerly property of Rāmapratāpa. — Copied by Kṣemavijayagaṇi. — Date of copying: Wednesday 8 śuklapaksa of Śrāvaṇa, saṃ 1833. — Covers the complete 14 adhyāyas, plus an extra 18 lines. — With one additional leaf, numbered 2, having 21 lines, called Aśvalakṣaṇaparīkṣā. — Jaina style Devanāgarī script.

Begins, leaf 1v: pam rāmapratāpena samarpitam idam ||

kamaladalabikāsaih sarbadevādhidevahs tribuvanajanacakşujyotişām tāh

mokşabhājām ca mārgyamti marah harati duritam voh bhāskaro nekabhānuh 1

śrādṛṣṭvā samyak nakulaḥ śāstram kṛtsnam himālo trīm

brūte śāstram anamtam ca śāstram krtvā samāsaneh 2

Leaf 3r has: iti śrīnakulabiraycate śālihotre prathamo dhyāyaḥ | 1 | 1

Ends, leaf 39r: iti śrīnakulakṛte asūcikasthite aśvaśālām vidhi samāptaḥ samvat 1833 varşe śrāvaṇasudi 8 aṣṭamī budhavāsare liṣitam pam | kṣimāvijayagaṇinām ||

Shelved at Add 2841.

Śārngadharasamhitā / Śārngadhara. — AD 1611

leaves 1-37, 40-94: paper. — In Sanskrit. — Formerly property of Vyāsamahādeva, s.o. Vyāsajanārdana. — Copied by Harirāma of the Pañcabhrātā family. — Date of copying: 2 śuklapakṣa of Vaiśākha, sam 1668. — Leaf 25 torn in half. — Leaves 31, 62 are śuddhipattras. First khanda ends on leaf 19r (end of adhyāya 7). — Jaina Nāgarī script.

Begins, leaf 1v: [...] śriyam sadadyād

Ends, leaf 94v: iti dāmodarasūno śārngadharasya viracitāyām samhitāyām cikitsārasacūrnaguṭikā avalehavastinirūhananetracikitsā prasādanakarmmavidhir adyāyaḥ | śubham astu | samvat 1668 samaye vaiśāṣasudi 2 subhadine likhyapitam śrīśrīvyāsajanārddanātmajaśrīvyāsamahadevena likhitam kāyastha harirāmapamcabhrātāśrīvāstavyena | [...].

Shelved at Add 2489.

Suśrutasamhitā / Suśruta

[With] Nibandhasangraha / Dalhana

leaves 1-38, 41-347, [48], 49-163: large paper. — In Sanskrit. — Bibliography: Meulenbeld, MN 408-409. — Nepalese script.

Begins, leaf 1v: [...] śārīrānamtaram cikitsāsthānam ārabhyate | athāto dvivramīyacikitsitam vyākhyāsyāmah

Ends, leaf 163r: doṣaghnam iti yena doṣeṇa sukhegega āracca | iti cikitsite nivaṃdhasaṃgrahe catvāriṃśo dhyāya | nivaṃdhanavahudhāvīkṣabhiṣak śrī ḍallanāvidhaḥ cikitsāsthānaṃ samāptaṃ | subham bhavatu | graṃthasaṃkhyā 1272 | cikitsāsthānam akarot suvodhaṃ bharatātmajaḥ |

Shelved at Add 1410.

Triśatī / Śārngadhara. — AD 1770

leaves 1-28: paper. — In Sanskrit. — Also called Vaidyavallabha. — Copied by Nānigadāsa(?), s.o. Cekṣacandra(?). — Date of copying: Tuesday 12 śuklapakṣa of Āṣāḍha, saṃ 1827. — Bibliography: Meulenbeld, MN 429; NCC 8.269a; cf. IO 2713. — Jaina Nāgarī script.

Begins, leaf 1v: [...] udayagiriśirastho nidrayā sūḍham etaj

Ends, leaf [28]r-[28]v: | 332 | iti yatipativaravaikumthāśramaśrīcaranaśişyena śārngadharena viracitāyām triśatī samāptā | samvat 1827 varşe āṣāḍhamāse śuklapakṣe dvādaśīyāmamgalabāsare bibabarajicchrī 108 śrīce[28v]kṣacamdrajitkasya śiṣyena nānigadāsena [i]dam gramtham likhitam |

Shelved at Add 2440.

Vaidyajīvana / Lolimbarāja

leaves 1-16: paper. — In Sanskrit. — Complete. — Devanāgarī script.

Begins, leaf 1v: [...] prakṛtisubhagagātram

Ends, leaf 16r: | 23 | iti divākarasutalolimvarājaviracite vaidyajīvane pamcamo vilāsah | Shelved at Add 1474.

Vaidyavallabhasangraha / Vangasena. — AD 1276

leaves 1-11, 13-100, 5001-5009, 510-550, [551]: palm leaf. — In Sanskrit. — Title from colophon.

— The relationship of this MS to the usual recensions of the Cikitsāsārasangraha is not yet clear.

— Formerly property of Brahmasāra, Sivabrahmabhāva and Lakṣmībrahmabhāva. — Copied by Vikrama. — Date of copying: Thursday 7 kṛṣṇapakṣa of Āṣāḍha, [Nepāla] samvat 397. — Copied in Śatagala vihāra(?). — Published description: BM 1879, IO 2698, by Haas. — Later hand than Add 2832. This important early MS must be taken into account in studying the formation of Vangasena's work. — With

a detailed handwritten note on the MS, including extracts, by E. Haas. - Nepalese script.

Begins, leaf 1v: namah śivāya |

natvā sivam prathamatah pranipatya candīm [...]

śrīvangasenabhisajā khalu yāsyavrddhavadyāya [...

effaced] şajātivrddhān | atra prapavām apahāya cikitsakānāma kāntavallabhatamālikhitāḥ prayogāḥ vasati yasya cikitsakavallabhaḥ sakala [... effaced]

dha[r]mmārthakāmamokṣāṇām ārogyam mūlam uttamam

ārogasa [... effaced]

Leaf 100v ends: devadāru ca mustavāvitrakāvilvayeśikā | ka[]lam śrngaveram ca pippalyaśvatthanas tathā | sauvīram amjanam

Leaf 5001r begins: kikākṣakaḥ | arkkakṣīraśata[]a cavacācavyahalatrikam |

Leaf 550v ends: ya[h] ka[ś]cid atra bhisajāvahuvedinas tān

prakramya neşa likhitah kila kin tu santah |

drahya [partly torn]

Leaf [551]r starts: syate me matta ko pi samādharmmakālo[]ayam niravadhi [...] so yam bhaven na yadi gābhiralamkhalānām

kvinnodyekena nasakottakam īksitah syāt |

kānjikāvāsaniyatāśrīgadādharasūnunā

kṛto yam vaṅgasenena saṅgraho vaidyavallabhah |

maheśvarapadāmbhojapūjaprakhyātamūrttate | kīrttyā projvalitāsisa jagate gurave namaḥ | tasyoddeśapayaḥpūra prakhyā[kṣā?]litamanomalaḥ |

alikhed vikramo sau samgraham vaidyavallabham |

samāpto mahāvaidyaśrīvangasenavaidyavallabhanāmo yam sangrahah |

samvat 397 āṣāḍhakṛṣṇasaptamyām vṛhaspatidine likhitam iti |

śatagalavihāravaidyavijñavrahmasārodivangatakasya pustakam

vijñavrahmasā[tā?]rokasya putra śivavrahmabhāvo lakṣmībrahmabhāvo ubhayakasya pustakam śubhamastu |

Shelved at Add 1707.

Yogaśataka / Nāgārjuna. - AD 1365

[With] Candrakalā / Dhruvapāla

leaves 1, 2, 4-8, 10-12, 14-17, 19-25, 1 leaf: palm leaf. — In Sanskrit. — Date of copying: Monday 11 suklapakşa of Pauşa, sam 486 (or Sunday suklapakşa of Bhādrapada, sam 404 | AD 1283). — Published edition(s) of work: Pondichéry 1979. — Bibliography: This is MS N2 of Filliozat's 1979 edition (see p.xxv-xxvii for extracts). — Published description: Filliozat 1979, xxv-xxvii. — Filliozat misinterprets the (virtually illegible) date of this MS (bhujanga = 8). For his reproduction of Cordier's transcription see 1979 ed., xxvi. — With a slip with notes by a modern scholar. — Nepalese script.

Leaf 1r has: sam 404 bhādrapadasudi 12 ra[...]

Begins, leaf 1v: om namah sarvva[...] | kṛtsnasya tantrasya gṛhītadhāmnā

Leaf 25v has verses 108, 109;

Leaf [26] badly effaced: see 1979 ed., xxvi.

Shelved at Or 150.

Yogaśataka / Nāgārjuna. — AD 1608

leaves 1-16: paper. — In Sanskrit. — Author's name not given in this MS. — Date of copying: 2 kṛṣṇapakṣa of Māgha, saṃ 1664. — Published edition(s) of work: Pondichéry 1979. — Bibliography: see Pondichéry ed. — Complete. — Jaina style Devanāgarī script.

Begins, leaf 1v: [...] krtsnasya tamtrasya grhītadhāmnā

Ends, leaf 16r: nānā prakārābhayanīḍabhūtam

kṛtsnam bhavaty evam anuttarogam | 121 |

iti śrīyogaśatakam sampūrnam | samvat 1664 varse māghamāse kṛśnapakṣe dvitīyām liṣitam idam vihārinā [... in different hand:] pustakam idam molilī | sam 1704 | madhya.

Shelved at Add 2538.

Appendix III

Ayurvedic manuscripts in the British Library

Abhinavamādhava (2 MSS)

On palm leaf. — In Sanskrit and Sinhalese. — Sinhalese script.

Shelved at Or. 6612(15) and Or 6612(16).

Aristaśataka (2 MSS)

On palm leaf. — In Sanskrit and Sinhalese. — Sinhalese script.

Shelved at Or. 6612(27) and Or. 6612(102A).

Așțaparīkșāva

On palm leaf. — In Sanskrit and Sinhalese. — Sinhalese script.

Shelved at Or. 6612(7).

Ätunta behet karana vedapota (2 MSS)

On palm leaf. — In Sinhalese. — Sinhalese script.

Shelved at Or. 6612(41) and Or. 6612(42).

Auşadha gana vidhiya

On palm leaf. — In Sinhalese. — Sinhalese script.

Shelved at Or. 6612(57).

Aușadhanighanțu

On palm leaf. — In Sanskrit and Sinhalese. — Sinhalese script.

Shelved at Or. 6612(56).

Behet nam

On palm leaf. — In Sinhalese. — Also called Behet patuna. — Sinhalese script.

Shelved at Or. 6612(33).

Bhaisajyakalpa

On palm leaf. — In Sanskrit and Sinhalese. — Sinhalese script.

Shelved at Or. 6612(3).

Bhaiṣajya mālāva

On palm leaf. — In Sinhalese. — Sinhalese script.

Shelved at Or. 6612(17).

Dravyaguṇa

On palm leaf. — In Sanskrit and Sinhalese. — Sinhalese script.

Shelved at Or. 6612(45).

Gedi veda pota

On palm leaf. — In Sinhalese. — Sinhalese script.

Shelved at Or. 6612(25).

Guṇaratnamālā. — AD 1767

On palm leaf. — In Sanskrit and Sinhalese. — Gujarātī script.

Shelved at Or. 8152.

Hasti sangraha sannaya

On palm leaf. — In Sinhalese. — Sinhalese script.

Shelved at Or. 6612(8).

Rasasamhitā

On palm leaf. — In Sinhalese. — Sinhalese script.

Shelved at Or. 5350.

Rasasamhitā

On paper. — In Sinhalese. — Sinhalese script.

Shelved at Or. 6612(58).

Roga ariştaya

On palm leaf. — In Sinhalese. — Sinhalese script.

Shelved at Or. 6612(59).

Sāranighaņtu (2 MSS)

On palm leaf. — In Sanskrit and Sinhalese. — Sinhalese script.

Shelved at Or. 6612(70) and Or. 6612(71).

Sārārthasangraha / Buddhadāsa(?)

On palm leaf. — In Sanskrit and Sinhalese. — Sinhalese script.

Shelved at Or. 6612(1).

Sārasankşepa

On palm leaf. — In Sanskrit and Sinhalese. — Sinhalese script.

Shelved at Or. 6612(106).

Sarasvatīnighaņtu (4 MSS)

On palm leaf. — In Sanskrit and Sinhalese. — Sinhalese and Tamil script.

Shelved at Or. 6612(18A), Or. 6612(67), Or. 6612(68) and Or. 6612(69).

Sarvānga veda pota

On palm leaf. — In Sinhalese. — Sinhalese script.

Shelved at Or. 6612(9).

Śāsvatanighanţu

On palm leaf. — In Sanskrit and Sinhalese. — Sinhalese script.

Shelved at Or. 6612(66).

Śataśloka / Vopadeva

On palm leaf. — In Sanskrit and Sinhalese. — Sinhalese script.

Shelved at Or. 6612(61).

Śataśloka sannaya / Vopadeva

On palm leaf. — In Sinhalese. — Sinhalese script.

Shelved at Or. 6612(60).

Siddhauşadhanighantu

On palm leaf. — In Sanskrit and Sinhalese. — Sinhalese script.

Shelved at Or. 6612(18B).

Siddhauşadhanighantu

On palm leaf. — In Sanskrit and Sinhalese. — Sinhalese and Tamil script.

Shelved at Or. 6612(63).

Śrīvāsudevanighaņţu

On palm leaf. — In Sanskrit and Sinhalese. — Sinhalese script.

Shelved at Or. 6612(109).

Trimśad bhisajāngaya

On palm leaf. — Another work, the Auşadha gaṇaya, appended to the same manuscript. — In Sinhalese. — Sinhalese script.

Shelved at Or. 6612(62).

Unmatta suva vana auşadha[?]

On palm leaf. — In Sanskrit and Sinhalese. — Sinhalese script.

Shelved at Or. 6612(81).

[Vaidyaka work]

On palm leaf. — In Sanskrit and Sinhalese. — Sinhalese script.

Shelved at Or. 6612(24).

[Vaidyaka work]

On palm leaf. — In Sanskrit and Sinhalese. — Sinhalese script.

Shelved at Or. 6612(14).

[Vaidyaka work on dietetics]

On palm leaf. — In Sanskrit and Sinhalese. — Date of copying: 18th century. — Sinhalese script.

Shelved at Or. 1208.

Vaidyālankāra (2 MSS)

On palm leaf. — In Sanskrit and Sinhalese. — Sinhalese script.

Shelved at Or. 6612(26) and Or. 6612(84).

Vaidyayantra (2 MSS)

On palm leaf. — In Sanskrit and Sinhalese. — Sinhalese script.

Shelved at Or. 6615(456A) and Or. 6615(456B).

Vanavāsanighaņţu (2 MSS)

On palm leaf. — In Pāli and Skt. — Sinhalese and Tamil script.

Shelved at Or. 6612(75) and Or. 6612(76).

[Varasārasaṅgraha]

[With] Commentary

On palm leaf. — In Sanskrit and Sinhalese. — Sinhalese script.

Shelved at Or. 6612(73).

Vişabhaişajya

On palm leaf. — In Sanskrit and Sinhalese. — Sinhalese script.

Shelved at Or. 6612(80).

Yogacintāmaņi / Harşakīrti. — AD 1786

On paper. — In Sanskrit and Sinhalese. — Sinhalese script.

Shelved at Or. 8150.

Yogārṇava (2 MSS)

On palm leaf. — In Sinhalese. — Sinhalese script.

Shelved at Or. 6612(96) and Or. 6612(110).

Yogaśataka (6 MSS)

On palm leaf. — In Sanskrit and Sinhalese. — Sinhalese script.

Shelved at Or. 6612(22), Or. 6612(23), Or. 6612(99), Or. 6612(100), Or. 6612(101) and Or. 6612(102B).

The Indian Ascetic Traditions and the Origins of Ayurvedic Medicine*

KENNETH G. ZYSK

One of the perennial problems in the study of traditional Indian medicine is a clear understanding of its early history and development. The textual tradition permits a delineation into two distinct phases of ancient Indian medicine. The first is based on a magico-religious form of healing, beginning in about the middle of the second millennium B.C.E. Its source derives largely from hymns scattered throughout the Vedic treatise, *Atharvaveda*, and it does not have a separate literary tradition, as is found in the healing arts of the ancient cultures of Greece and Egypt. Disease in this Vedic system of medicine was conceived to be possession by divine demonic entities, and therapeutics involved a religious ritual in which the appropriate *mantras* were recited, demons exorcised, and powerful amulets, usually of a vegetal origin, consecrated and employed.

This type of healing never completely disappeared, but seems rather to have been gradually superseded by a more empirico-rational system of medicine, which constitutes the second phase. For the first time entire texts, concerned only with medicine, were composed. The earliest extant books include the treatises or *saṃhitā*s of Caraka, Suśruta and Bhela, the original parts of which date from around the common era. Unlike the medicine in phase one, this form of healing, which came to be known as *āyurveda*, 'the science of longevity,' was based on empirical observations and rational explanations of observed phenomena.

In it, diseases are understood in terms of a humoral theory. There are three "peccant" humours' (doṣas) in the body: wind (vāta, vāyu), bile (pitta) and phlegm (kapha, śleṣman), which operate singly or in combination. The doṣas or humours are actually waste products of digested food, occurring in quantities greater or lesser than needed to maintain normal health. On analogy with the humours of Hippocratic and Galenic medicine, they act as vitiators by disrupting the normal balance of the bodily elements, which in turn are modifications of the five basic elements (earth, air, fire, water, space [ether]) found in all nature. The resulting disequilibrium of the bodily elements then produces disease. The principal aim of the ancient āyurvedic physician was to recognise which one or several of the humours caused the disruption to the elements and to re-establish their equilibrium by means of therapeutics which included drugs bringing about opposite effects, diet and daily regimen, although surgery was also sometimes recommended.

The crucial problem facing the student of ancient Indian medical literature is understanding the process which led to the dramatic paradigm shift (to use Thomas Kuhn's phrase) from a fundamentally magical and religious system of medicine to one dominated by a philosophy anchored in empirical and rational principles. In order to begin to seek a solution to this problem one is quite naturally drawn to examine the history of

This paper was read at the 3rd International Conference of the International Association for the Study of Traditional Asian Medicine, held in Bombay, India in January, 1990, and derives from the author's forthcoming book, Asceticism and Healing in Ancient India: Medicine in the Buddhist Monastery (Oxford University Press, 1990).

medicine in the period immediately prior to the formulation of the early medical treatises, a time characterised by radical changes and fresh new ideas on the Indian subcontinent. Contacts with the world of the Hellenistic west were being made and heterodox religious movements, firmly rooted in asceticism and propagated, among others, by the Buddhists, Jainas and Ājīvikas, were becoming popular and attracting large followings. The orthodox Brāhmaṇism of the Vedic tradition appears to have lost its firm grip on the socio-religious life of the Indians and was entering a period of dormancy, anticipating a later resurgence. A close examination of the sources from this transitional period, therefore, sheds much light on the developments in the sphere of medicine.

The richest source of medical knowledge during this time derives from the Pāli texts of the early Buddhists. The *Mahāvagga* of the Vinaya Piṭaka, which at best estimates dates from around the fifth or fourth century B.C.E., provides important information pertaining to the early Buddhist use of and involvement with medicine. In particular, the sixth chapter entitled 'medicines' (*bhesajja*) details the practices and drugs permitted in the monastic community (*saṅgha*), and the eighth chapter records a popular story, containing the healing feats performed by the lay physician Jīvaka Komārabhacca.

A critical comparison of these passages in the Pāli with the corresponding sections in the Sanskrit medical texts of Bhela, Caraka and Suśruta demonstrates a fundamental agreement both in language and in overall approach to healing. This strongly suggests that there was a common source or storehouse of medical knowledge upon which early Buddhism and early *āyurveda* drew for their respective medical disciplines. A sterling example of such a congruence between āyurvedic and Buddhist medicine occurs in the story of the healer Jīvaka Komarabhacca.

The Buddha suffered from a condition in which his body was filled with the 'peccant' humours ($k\bar{a}ya\ dos\bar{a}bhisanna$). The treatment for this malady, administered by the lay Buddhist physician Jīvaka, involved the oiling of the Buddha's entire body and then the giving of a weak purgative (virecana) (MV 8.31-33):

It then occurred to Jīvaka Komarabhacca: "It is not proper that I should give the Lord a coarse purgative." Having mixed three handfuls of lotuses with various medicines, he approached to where the Lord was; ... presented him a handful of lotuses [and said]: "O good one, may the Lord inhale this first handful of lotuses. It will evacuate the Lord ten times."

He administered this two more times, after which the Buddha took a bath, resulting in a total of thirty purgations. Jīvaka then instructed the Lord to eat only a weak broth of alms-food (yūsapiṇḍa) until he was fully recovered.

The reader or listener at first might be inclined to consider this passage as some sort of glorification of the healing powers of the physician Jīvaka who could heal even the Buddha by means of a magical cure involving the inhalation of the fragrance of lotuses, plants nearly always associated with important personages in India. A close examination of the medical books (saṃhitās), however, demystifies the passage and reveals that the form of therapy applied by Jīvaka was directly in accordance with medical teachings.

In his chapter on the treatment of diseases by means of purgatives and emetics, Suśruta, after elaborating the causes of various diseases according to the humoral aetiology, states that these therapies are the best for the removal of 'peccant' humours (doṣas) (SuCi 33.4). He goes on to detail the correct course of treatment to be employed: before a patient is evacuated, he first must be oiled from head to foot. He is then given a purgative appropriate to his particular physical characteristics and humoral imbalance.

After the evacuative has been administered, he should be given only light and lukewarm gruel to drink (SuCi 33.4-26). In the case of a patient who has a delicate constitution, the medical authors prescribe a special form of evacuation therapy. This treatment is recommended especially for ascetics whose daily regimen results in a weak digestive fire and soft bowel movements (CaKa 1.19; SuSū 43.9):

The powder of the seeds of the emetic-nut (madana) or of the ridged-gourd (kṛtavedhana), repeatedly soaked in a decoction of emetic drugs [and then dried], ... should be sprinkled over large lotus flowers. The patient should then smell the flower and, by inhaling the powder, he will evacuate [the 'peccant' humours] by means of vomiting.

After being purged in this manner, the patient, according to the general course of treatment, should consume only light foods until the digestive system has re-established its state of equilibrium. This is precisely the therapeutic procedure executed by Jīvaka to cure the Buddha.

A firm connection between this early Buddhist medicine and early āyurveda compels one to seek a common source of medical knowledge. Scrutiny of the relevant sources from the intervening period reveals that a possible common source lies in the traditions of wandering ascetics known as parivrājakas (Pāli paribbājaka) and śramaṇas (Pāli samaṇa), from which, among others, Buddhism derived.

The parivrājakas and śramaṇas were groups of mendicant ascetics who rejected the fundamental ideologies of the orthodox brāhmaṇical culture and who attempted to find explanations of the universe and of life through the process of empirical reasoning, with a particular emphasis on natural science. A member of such a group, mentioned in the Bhagavatī Sūtra of the Jainas (15.539, 658-669), was a certain Aggivesāyaṇa whose name may have been connected to Agniveśa, the semi-legendary physician upon whose teachings the Caraka Saṃhitā is based. Likewise, Buddhist sources themselves point to the connection between medicine and asceticism. The Brahmajālasuttanta of the Dīghanikāya (1.1.27; 1.12) mentions different medical practices characteristic of early āyurveda in which certain śramaṇas (a term used in the Pāli) engaged for their livelihoods.

Perhaps the most important evidence for a connection between medicine and the śramanas (ascetics) is found in a non-Indian source. The Greek historian and geographer Strabo (c. 64 B.C.E.-21 C.E.), quoting Megasthenes (fl. 300 B.C.E.), who resided for a time at the court of Candragupta Maurya in Pāṭaliputra (modern Patna), writes in his Geography (15.1.60) that there was a sub-group of śramanas (GARMANAS) known as physicians (IATRIKOI). Megasthenes, as cited by Strabo, explains that "the physicians" lived the ascetic and mendicant life and philosophised about the nature of man. They cured through the use of grains, and when they employed drugs, the most highly esteemed were ointments and poultices. This approach to medicine bears a fundamental similarity in theory and practice to that found both in the Buddhist sources and in the āyurvedic treatises, for both mention the origins of mankind's suffering in terms of a theoretical framework, and advocate the use of drugs, ointments and poultices as principal types of therapeutics. Megasthenes' statements, as reported in Strabo's Geography, suggest a strong link between traditions of medicine and the ascetic śramaņas, and point to the śramaṇa-groups as the common source for the medical disciplines of early Buddhism and early āyurveda.

The information known about the śramaṇas shows them to have been on the fringes of the brāhmaṇical society. This exclusion from the ancient social and religious life of

the twice-born fits the general picture of physicians presented through the brāhmanical literature. As early as the later Vedic exegetical treatises, known as Brāhmaņas (c. 800-500 B.C.E.), physicians, because of their contact with all sorts of people, were considered to be extremely polluted, and excluded from the sacred Soma sacrifice, and a ranking in the socio-religious hierarchy (TS 6.4.9.1-2, etc.). The same attitude persisted in later brāhmaņic India, as recorded in the law-books which, based on the law-book (dharmaśāstra) of Manu, specify that physicians are to be avoided at the sacrifices and that food given by physicians is, as it were, pus and blood, and therefore must not be consumed (Manu 3.108, 152; 4.212, 220). Very likely, physicians, because of their being shunned by the dominant forces of the culture, were forced to the borders of society, where they may well have come in contact with others experiencing a similar alienation. Historically, these ancient Indian 'hippies,' were the various groups of ascetic wanderers or śramanas. Finding acceptance among the communities of these heterodox ascetic renunciants and mendicants who did not censure their philosophies, practices and associations, the healers, like the knowledge-seeking ascetics, wandered the country-side, performing cures and acquiring new medicines, treatments and medicinal information, and eventually became indistinguishable from the ascetics with whom they were in close contact. A vast storehouse of medical information soon developed among these wandering physicians who, unhindered by brāhmaņic strictures and taboos, began to conceive an empirically and rationally based medical epistemology with which to codify and systematise this efficacious and ever growing body of medical knowledge. Fitting into the Buddha's key teaching of the 'middle way' between the extremes of world indulgence and self denial, healing became part of Buddhism by providing the means to maintain a healthy bodily state characterised by an equilibrium both within the organism and between the body and its environment. Portions of the repository of medical lore were codified in the early monastic rules, thereby giving rise to a tradition of Buddhist medicine. This codification of medical practices in the monastic rules accomplished perhaps the first systematisation of Indian medical knowledge and probably provided the model for the later handbooks and recipe-books of medical practice.

At a later period, after the beginning of the common era, when the early medical treatises of Caraka and Suśruta were being codified in their extant forms, the healing arts became part of the brahmanically orthodox Hindu religious tradition. This is clearly evident from the introductory portions of these texts, which recount how medicine was mythically transmitted to man from the Hindu god Brahmā and which speak of strong links to the śruti (revealed)-tradition of the Vedas (CaSū 1.1-40, 30.21; SuSū 1.1-6, 17, 41). The Hinduisation of medicine was accomplished by the application of an orthodox brāhmaņical veneer onto an already well-established foundation of medical lore derived largely from the tradition of heterodox ascetics. Medicine therefore was taken over root and branch from these ascetic traditions by the Hindu intellectuals and made the Hindu science (vidyā) of āyurveda, as we now have it. Similar Hindu strata occur in the introductory parts of the Nāṭyaśāstra and the Kāmasūtra, suggesting that a pattern of Hindu assimilation may be found in certain other forms of the didactic śāstra-literature. The occurrence of this phenomenon corresponds to the time of the Gupta dynasties in India (fourth to seventh centuries C.E.), during which the brahmanical religious tradition experienced a resurgence through a more popular theistic appeal, commonly known as Hinduism.

Āyurvedic medicine, therefore, owes much of its fundamental principles and practices to heterodox ascetic groups, most importantly, the Buddhists, whose monastic organisation provided a suitable vehicle for the first codification of medical knowledge. This systemised medical knowledge, therefore, helps to form the core of the later tradition of āyurveda, which nowadays enjoys active patronage from many Indians, the length and breath of India, and in Sri Lanka.*

Bibliography and Abbreviations

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Bhela

Birnbaum, Raoul

Caraka (Ca)

Ci

Demiéville, Paul and Jean Filliozat

Dīghanikāya

Ka

Kuhn, Thomas S.

Manu

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^{*} Editors' note: Comments on this paper are invited. The author reserves the right to reply to all comments in later issues of this journal.

Manu

Mahāvagga (MV)

Strabo

Suśruta(Su)

Sū

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Zur Bedeutung des Asketentums für die Entstehung des Ayurveda

Bemerkungen aus philosophischer Sicht zu Kenneth G. Zysks These vom Ursprung äyurvedischer Medizin

ECKARD WOLZ-GOTTWALD

Kenneth G. Zysk fragt, wie ein 'Paradigmen-Wechsel' in der altindischen Heilkunde von dem magisch-religiösen Zugang zu einem empirisch-rationalen System möglich sein konnte,¹ und stellt die These auf, daß die rationale Medizin größtenteils aus heterodoxen Asketenkreisen stamme und erst bei der Abfassung der großen Sammelwerke von Caraka und Suśruta in die orthodoxe brāhmaṇische Tradition integriert wurde. Hiermit ist ein wichtiges Problem der Entstehung der empirisch-rationalen Medizin angegangen und ein ungewöhnlicher, von der Forschung in dieser Weise noch nicht in Erwägung gezogener, Lösungsvorschlag gegeben. Zum Weg der Argumentation wären jedoch sicher auch kritische Anfragen möglich.

Zysk kann zeigen, daß es in der Entstehungszeit der altindischen Heilkunde Wanderasketen gab, die medizinisches Wissen besaßen. Da Asketen wie Ärzte seines Erachtens am Rande der damaligen Gesellschaft gelebt haben sollen, schließt er, daß beide Gruppen engen Kontakt hatten, schließlich miteinander verschmolzen seien und so, unbehindert von brāhmaṇischen Regeln und Tabus, eine rationale Medizin entwickeln konnten.

Wenn angenommen werden kann, daß manche Wanderasketen medizinisches Wissen besaßen, muß dies allerdings nicht bedeuten, daß die rationale Medizin des Äyurveda sogar 'größtenteils' aus diesen Asketenkreisen stammt. Da die śramaṇas außerhalb der brāhmaṇischen Orthodoxie standen, wird hier zwar eine Möglichkeit aufgezeigt, wie die oft unorthodoxe rationale Medizin entstanden sein könnte. Hierüber lohnt es sich vielleicht nachzudenken. Eine zwingende Schlußfolgerung liegt jedoch kaum vor,² wobei vorerst von den Problemen der Datierung buddhistischer Texte sowie des Nachweises einer echten Kodifizierung medizinischen Wissens speziell bei Buddhisten gänzlich abgesehen werden soll.

Gegen Zysks Schlußfolgerung spricht, daß die Heilpraktiken der rationalen Medizin des Äyurveda oft sowohl den brāhmaṇischen Geboten wie auch in gewisser Weise der asketischen Praxis widersprechen. Wenn so zum Beispiel Rindfleisch bei bestimmten Krankheiten als Nahrung gepriesen wird, so widerspricht dies nicht nur der schon zu dieser Zeit von den Priestern gebotenen Verehrung und Heiligung der Kuh, sondern auch zum Teil der in Asketenkreisen geübten Zurückhaltung gegenüber der Tötung von

¹ Es wäre hier schon zu fragen, ob bei der oft engen Verwobenheit von magischen und rationalen Elementen in den klassischen Sammlungen (vgl. auch Caraka-Samhitā 1.30.21) wirklich von einem 'Paradigmenwechsel' im Kuhn'schen Sinne gesprochen werden darf; s. in diesem Zusammenhang auch Zeitschrift der Deutschen Morgenländischen Gesellschaft 138.1988, S.416.

² Wenn Zysk in einem anderen Aufsatz schreibt: 'In this way one can find in Buddhist medicine the very beginnings of āyurveda' (Kenneth G. Zysk: 'Buddhist Healing and Āyurveda: Some General Observations', in: S.K. Maity et al. (Ed.), Studies in Orientology. Essays in Memory of Prof. A.L. Basham, Agra 1988, S.124-135), scheint er sich hier ('Megasthenes' statements ... point to the śramaṇa-groups as the common source for the medical disciplines of early Buddhism and early āyurveda') auch zu widersprechen.

Tieren. Ähnliches gilt, wenn zahlreiche Mittel zur Stimulierung der Sexualkraft beschrieben sind oder Alkohol als wichtiges Therapeutikum in der Medizin empfohlen wird.³ Rindfleich, ausschweifender Geschlechtsverkehr und Alkohol wurden zwar von dem orthodoxen Priestertum verneint, aber in vergleichbarer Weise wahrscheinlich auch von den damaligen Wanderasketen. Hinweise, daß das empirisch-rationale Denken des Äyurveda wohl auch in einer in besonderer Weise den weltlichen Zusammenhängen zugewandten unabhängigen Ärzteschaft entstanden ist, sind somit gegeben.⁴

Doch sollte die Bedeutung des Asketentums für den Āyurveda, auf die Zysk aufmerksam macht, trotz allem nicht unterschätzt werden. Besonders in der Caraka-Samhitā ist, neben der rationalen Medizin und der magisch-religiösen Therapie, auch eine spirituelle oder 'philosophische Psychotherapie' bekannt, die spirituelles Wachstum als 'höchste Form der Therapie' (naiṣṭhikā cikitsā) ansieht (Caraka-Saṃhitā 4.1.94)⁵. Besonders dieser dritte Zugang, das dritte 'Paradigma' des klassischen Āyurveda, wurde wohl in starker Weise aus Asketenkreisen aufgenommen und erlangte vor allem bei Caraka, auch im Bereich der Psychosomatik, eine beschränkte Bedeutung.⁶

Die klassischen Sammelwerke, insbesondere die Caraka-Samhitā, wurden stark als medizinische Enzyklopädien verstanden, in der auch die verschiedenen 'Paradigmen' nebeneinander Platz finden konnten. Auf die Rolle der Asketen bei der Entstehung des Äyurveda aufmerksam gemacht zu haben, ist ein Verdienst der Analyse von Zysk. Ob neben der spirituell/philosophischen Thematik in größerem Ausmaße auch rationalmedizinisches Wissen aus Kreisen der śramanas stammt, kann vielleicht in dem von Zysk angekündigten Buch überzeugender und näher belegt werden.

³ Eine ausführliche Abhandlung zahlreicher Textbelege bei: Debiprasad Chattopadhyaya, Science and Society in Ancient India, Amsterdam 1978, S.44;375; ders. (Hrsg.), Studies in the History of Science in India, Vol. I, New Delhi 1982, S.218-225.

⁴ Vgl. hierzu auch Albin Eser et al. (Hrsg.), Lexikon Medizin Ethik Recht, Freiburg u.a. 1989, Sp.922-924.

⁵ S. hierzu bes. Sudhoffs Archiv 70.1986, S.20ff. So wird bei Caraka in dieser Weise von einer Dreiteilung des Heilverfahrens gesprochen (1.11.54;1.1.58). Vgl. auch die Dreiteilung der Krankheitsarten in Suśruta-Samhitā 1.1.4 (zur hiermit verbundenen Problematik s. auch Rahul Peter Das, Das Wissen von der Lebensspanne der Bäume. Surapālas Vṛkṣāyurveda, Stuttgart 1988, S.268;519).

⁶ Die 'philosophische Psychotherapie' spielt in den anderen klassischen Werken keine Rolle. Daß man sich aber mit der Problematik auch in späterer Zeit auseinandersetzte, darauf deutet vor allem das bisher in keine europäische Sprache übersetzte Äyurvedasūtra mit dem Kommentar des Yogānandanātha, einem aus Texten vom 1. bis zum 15.Jahrhundert n. Chr. zusammengestellten 'Leitfaden der Medizin'. Hier werden unter anderem auch die Rolle von Yoga und spiritueller Philosophie in Therapie und Psychotherapie diskutiert. (The Äyurvedasūtram, with the Commentary of Yogānandanātha, hrsg. v. R. Shama Shastry, Mysore 1922).

On Two Medical Verses in the Yuktidīpikā

ALBRECHT WEZLER

1. The Yuktidīpikā (= YD), the most important commentary on Īśvarakṛṣṇa's Sāṃkhyakārikā extant and available,¹ contains — as Śāstra works generally do — not a few quotations, both in prose and verse. R.C. Pandeya's edition (pp. 177sqq.) includes among other things also an 'Index of Verses Quoted in YD' and an 'Index of Prose Passages Quoted in YD'. Already a cursory comparison between these two alphabetically arranged lists shows that the prose passages could be identified to a remarkably large extent, whereas for very few of the verses is their source mentioned. Now it is clear that in view of the paucity of suitable and reliable research tools an editor is to a considerable degree dependent on his own knowledge of texts and his own power of recollection, unless he is assisted by friends and colleagues or by a stroke of luck. It would hence not be fair to find faults with an editor for failing to identify each and every quotation found in his text, provided he has done what he ought to do, namely add a list of all the quotations.

The importance of such an index is too obvious to call for further comment. Indeed, a consolidated index of the indexes already available (as a rule attached to editions, e.g. of philosophical texts) should be compiled (with the help of a PC) and published. Among other things this would surely go far towards identifying many of the quotations that have so far resisted attempts at identification.

But even then there is very great likelihood indeed that in most cases it will be only a certain percentage of the quotations a particular text contains that can be traced back to their original source; the number of Sanskrit texts which have not come down to us is simply too large to warrant the hope that completeness, and perfection, can be achieved in this regard. On the other hand, it need hardly be stated that except for this untraceable rest all the other quotations in a given text should certainly be identified. One of the reasons is the important role which quotations play in discussions about the relative chronology of texts, i.e. in establishing a terminus ad quem and/or a terminus post quem, etc. Quite evidently, such arguments cannot be based on an accidental or arbitrary choice of quotations, but presuppose — ideally that all of them without exception have been identified, but as this is practically never possible — that at least all those which have been taken from extant texts² have actually been identified.³

¹ I should like to add the remark that the critical edition of this text, the preparation of which I announced quite some time ago (see fn.47 on p.455 of my article 'Some Observations on the Yuktidīpikā" in: ZDMG, Supplement II, Wiesbaden 1975, pp.439-455), will finally be completed in the course of the next year in cooperation with two Japanese colleagues, Prof. Shunjun Motegi and Mr. Hisayoshi Miyamoto. — In 1970 Dr. Ramāśańkar Tripāṭhī published in Varanasi a book entitled Īśvarakṛṣṇaviracitā Sāṃkhyakārikā Þā. Ramāśaṅkaratripāṭhiviracitayā Tattvaprabhākhyayā vyākhayā ajñātakartṛkayā Yuktidīpikayā vivṛtyā ca vibhūṣitā, which gives the bare text of the YD following to all appearances Pandeya's edition. The recent publication mentioned below in fn.12 deserves still less to be called an edition.

² I hope that this kind of quotation is meant by the use of the word 'some' in the statement 'possibly, when a critical edition of the text has been completed and some of the many quotations identified, one will be able to determine a more precise date' [of the YD], found on p.228 of G.J. Larson's and

2.1. As for the YD, the result achieved by Pandeya can be improved upon. E.g. the hemistich

gṛhasthaḥ sadṛśīṃ bhāryāṃ vindetānanyapūrvikām found on p.15 l.30 and stated by the — anonymous⁴ — author to stem from 'another śāstra' (śāstrāntara°) is a quotation of GautDhS (1.)4.1, which however reads ananya-pūrvāṃ yavīyasīm.⁵ The context, but more importantly the contents of the quotation itself, quite clearly point in the direction of the Dharmaśāstra, so that it is somewhat surprising that Pandeya failed to identify it and hence to recognize that its being part of a verse is highly questionable.

Or to give another example, the arya

vṛkṣāgrāc cyutapādo yadvad anicchan naraḥ pataty eva tadvad guṇapuruṣajño 'nicchann api kevalī bhavati

quoted⁶ on p.21 ll.28-29 is verse 83 of the Paramārthasāra of Ādiśeṣa, where however the reading (naraḥ) kṣitau patati seems to be attested without variant(s). This identification was apparently made first by Danielson,⁷ who also used it as (the only) argument for determining the terminus ad quem of the Paramārthasāra, in that he subscribed to Frauwallner's view that 'the YD existed in the year 550 A.D.' and hence drew the conclusion that 'the PS must be earlier than that'. This is, I think, a good example of the danger which one should try not to incur, viz. relying on the date of a text B, without carefully examining the evidence, or pseudo-evidence, on which it is based, in order to determine the relative chronology of another text A in which one is primarily interested. It is admittedly rather annoying to have to enter into a discussion of the date of a second text, or even many more texts, since quite often such problems

R.Sh. Bhattacharya's volume Sānnkhya. A Dualist Tradition in Indian Philosophy, (Encyclopedia of Indian Philosophies), Princeton 1987.

³ See also the remark on p.458 (together with fn.6) of my article 'Further References to the Vaiśeṣika-Sūtra in the Pātañjalayogaśāstravivaraṇa (Studies on the Pātañjalayogaśāstravivaraṇa III)' in Amṛtadhārā, Prof. R.N. Dandekar Felicitation Volume, ed. by S.D. Joshi, Delhi 1984, pp.457-472.

⁴ The ascription of the YD to Vācaspatimiśra (I.) in the colophon of the Poona MS. is so evidently wrong that I do not deem it necessary explicitly to justify why the author has for the time being to be regarded as unknown. In passing I should, however, like to mention that this error, or the — partially unnecessary — discussion it has provoked, has in its turn had the consequence that MSS. of Vācaspatimiśra's Tattvakaumudī which do not contain even a hint to this effect have wrongly been listed in the entry on the YD in the corresponding, not yet published volume of the New Catalogous Catalogorum.

⁵ See also VāsDhS 8.1 and the Bhaviṣyapurāṇa as quoted by F. László, *Die Parallelversion der Manusmṛti im Bhaviṣyapurāṇa*, (AKM XI,2), Wiesbaden 1971, p.166 (6.5c); cf. also M. Shee, tapas und tapasvin in den erzählenden Partien des Mahābhārata, Reinbek 1986, pp.63ff. — It seems that the characterization of Sudakṣiṇā as ātmānurūpā (with reference to Dilīpa) in Raghuvaṃśa 1.33 has also to be seen in the light of this rule of the Dharmaśāstra.

⁶ It is introduced by uktam ca, but not followed by an iti.

⁷ H. Danielson, Ādiśeṣa, The Essence of Supreme Truth (Paramārthasāra), Sanskrit Text with Translation and Notes, Leiden 1980, pp.1f. and fn.268 (p.77); in the 'Introduction' it is convincingly shown that this work cannot be classified as belonging to the Sāṃkhya school of thought.

turn out to have a snowball effect, but there is no way by which this kind of ensuing complexity could legitimately be avoided.

2.2 Pandeya's 'Index of Verses Quoted in YD' includes a rather strange entry too, viz. 'sambandhisabdaḥ sāpekṣo 25', for as a rule verses, or parts of verses, quoted in the YD are quite clearly marked off in his edition, but one looks in vain for such a typographically distinct element on p.25. Only when reading the whole of this line by line does one finally chance upon the clause sambandhiśabdah sāpekşo nityam vṛttau samasyate (1.19). Now this forms part of the counterargument — its prior part being pūrva eva samāso 'stu — of the defensor; he wants to invalidate an objection (of the opponent) by deciding in favour of the first interpretation of the compound mūlaprakṛti (according to which it is to be paraphrased by mūlam cāsau prakṛtiḥ, and not mūlam prakṛtīnām) and by (now directly) refuting the view that the karmadhāraya compound would not be correct (a view based on and explicitly justified by quoting Patanjali's famous dictum saviśeṣāṇām vṛttir na [vṛttasya vā viśeṣaṇam na prayujyate] (Mahābhāṣya I 361.5ff; cf. II 18.7ff), 'no word-composition (i.e. compounding) [is allowed] of [words] qualified [by an outside] word[, nor is a qualifying word [[allowed to be added to that part of speech]] which has [[already]] been made a compound]'),8 and this view seems to be refuted by the statement, just quoted, viz. sambandhiśabdaḥ sāpekṣo nityaṃ vṛttau samasyate, which is, however, found only in one of the two MSS. used by Pandeya for his edition of the YD, namely that of Ahmedabad.

Now the counterargument as a whole is introduced by an *ucyate* which is used in this function stereotypically in the YD — just like $\bar{a}ha$ announcing an objection of the opponent. Therefore one cannot but wonder why the second part of this counterargument could be regarded by Pandeya as a quotation: in fact there is in the text no indication of a quotation. Most probably Pandeya thought of Vākyapadīya III 748 [= 14 (Vṛttisamuddeśa).48], which reads thus:

saṃbandhiśabdaḥ sāpekṣo nityaṃ sarvaḥ prayujyate [svārthavat sā vyapekṣāsya vṛttāv api na hīyate], 10

but Pandeya has failed to add this reference, either in a footnote on p.25 or in the 'Index ...', and has forgotten to mark off what he considered to be a quotation (if this idea did not come to his mind only later, i.e. at the time of compiling the indexes). In this connection it has to be noted that such confusion would by no means be surprising in an edition which abounds in (prose) quotations which are identified in footnotes given at the bottom of the page where they occur, but which are nevertheless (or for that very

⁸ My translation is modelled on that of S.D. Joshi, *Patañjali's Vyākaraṇa-Mahābhāṣya Samarthāhnika* (P. 2.1.1) ..., (Publications of the Centre of Advanced Study in Sanskrit, Class C, No. 3), Poona 1968, p.40.

⁹ According to the numbering of the critical edition by W. Rau, *Bhartrharis Vākyapadīya*, (AKM XLII,4), Wiesbaden 1977.

¹⁰ This kārikā is also quoted by Kaiyaṭa on Mahābhāṣya I 361.1f., viz. Pradīpa (NSP-Edition) II 319 b 25-26.

reason?) not included in the corresponding index,¹¹ so that everybody is free to guess what this index is meant to embrace!

What is then the meaning of this 'quotation'? Shiv Kumar and D.N. Bhargava, to whom we owe the first volume of an English translation of the YD,12 have correctly recognized that sapekso has the function of a predicate, but their rendering of the first clause by 'the related word is always needed' is quite evidently wrong, and nonsensical¹³ (whereas 'and is also compounded in a complex formation'¹⁴ as equivalent of the second clause is unobjectionable). Instead it should be translated as follows: 'A relational word is always dependant on/always shows a relation to [the correlated word].' Thus this sentence as a whole indeed expresses basically the same idea as Bhartrhari's verse, although in a very abridged form, especially as regards padas c and d which can be translated thus: 'This its interdependence [with the other word correlated with it] is [also] not abandoned even in a complex formation (i.e. in compounding) just as its own meaning [is not abandoned by a relational word].' As regards the relation in which the YD's sentence stands to the Vakyapadiya verse, it cannot simply be taken for granted that the former is a quotation of the latter. All that can be said with certitude is that this verse may have lurked in the mind of whoever uttered the sentence. 15 In cases like this it is evidently not at all easy clearly to distinguish between an intended quotation, i.e. an utterance made by someone in order to repeat another person's statement verbatim, but differing from it because of a slip of memory, on the one hand, and an original statement, on the other, the formulation of which is, consciously or unconsciously, influenced by what has been said by another person. 16 But it need hardly be added that in spite of the boundary being fluid this distinction as such is of no little importance.

However, it is not only highly questionable whether this sentence can in fact be regarded as a quotation, but it is also not clear at all that it forms a part of the text of

¹¹ Thus e.g. on p.23 quotations from the Chāndogya-Up., viz. 8.7.1 (rightly called *prajāpater vacanam*, but containing many variants) and 3.11.4-6 (with variants) and Muṇḍaka-Up. 1.1.4 (also with variants); two more sentences, viz. vidvāṃsaḥ prajāṃ nākāmayanta, kiṃ prajayā kariṣyāmaḥ and putraiṣaṇāyāś ca vittaiṣaṇāyāś ca vyutthāya bhaikṣacaryāṃ caranti, have not been recognized as quotations (from BĀU 4.4.22).

¹² Yuktidīpikā Vol.I, Delhi (Eastern Book Linkers) 1990. The text is also given, but without any variants or explanations.

¹³ As for the quality of this translation in general, it is enough to note that prākṛtikā vikārapuruṣās tathā of Ārambhaśloka 6 is rendered by 'the materialists (i.e. the Cārvākas) and the perverted persons', and that such howlers are a common feature of it. — The rendering (of the YD passage in question) in the volume on Sāṃkhya of the Encyclopedia of Indian Philosophy (cf. fn.2 above), p.238 '(the word 'primordial') ... cannot be attached to another word ...' is likewise not acceptable.

On the term vrtti cf. P. Thieme's review of L. Renou, Terminologie grammaticale du Sanskrit, Paris 1957, in GGA 212, 1958, 23ff. (= Kleine Schriften, Wiesbaden 1971, pp.731ff.).

¹⁵ And perhaps he knew only the version of the verse which is attested e.g. in the Vaiyākaraṇabhūṣaṇa (ed. by R.B.K.P. Trivedī, (BSS no. LXX), Bombay 1915), p.160, viz. with samasyate instead of prayujyate. — On the secondary reading vākyavat (for svārthavat) cf. S.D. Joshi, op. cit. (fn.8), pp.38f.

¹⁶ A particularly noteworthy subvariety of the latter is the allusion to a famous statement, known to the educated, the deliberate use of a formulation, hallowed by time and tradition, in a modified form.

the YD. Doubts seem to be justified first of all because the sentence is attested to only in one of the MSS., but in this case observations about the dialectical structure and the 'formulae' used in the stylized discussion that very largely characterize the YD allow one to come to a decision which is well founded and hence convincing. For the taking up of an argument brought forward already earlier — and therefore explicitly characterized as $p\bar{u}rva$ —¹⁷ is not something done only once by the author of the YD. On the contrary, there are some more instances (even though it does not seem to be a particularly common feature of this text), and in the other cases it is, significantly enough, also coupled with a subsequent recalling, i.e. quoting, of an objection, or objections, raised earlier against it, but now only in order to reject it or them definitively. At YD 38.23 we read: ucyate ... athavā punar astu pūrvakam evodāharaņam (cf. 38.20) | yat tūktam anekāntād iti (cf. 38.20) atra brūmaḥ ...; and at 3.23f.: ucyate — pūrva eva parihāro 'stu (cf. 3.16) athavā punar astu tantrāntarokter ity ayam parihāraḥ (cf. 3.18) | yat tūktaṃ pramāṇānupadeśaprasanga ity atra brūmaḥ In the second case, though, the clause containing the key word pūrva is not immediately followed by the yat tūktam phrase, but quite evidently only because a second alternative refutation is also taken into account, or rather preferred to the first one. The structure of the 'formula' as such, however, stands out distinctly in relief: it is of such a kind that the clause containing the key words pūrva and astu must be immediately followed by yat tūktam ..., except for the case - which is, however, perfectly understandable both in terms of logic as well as of syntax — when it is stated that a second alternative refutation (parihāra) holds good equally. And this observation is strikingly confirmed if one also looks into the Mahābhāṣya, which obviously served as a model for the author of the YD in this regard; 18 for it is this immediate sequence that is found also in Patanjali's work, e.g. at I 10.26 athavā punar astu jñāna eva dharma iti (cf. 10.5) | nanu coktam jñāne dhārma iti cet tathādharma iti (cf. 10.5ff.) ..., or 12.21: athavā punar astu sūtram (cf. 11.15) nanu coktam sūtre vyākarane şasthyartho 'nupapanna iti (cf. 11.16ff.) | ... or 17.16: athavā punar astu visayena tu nānālingakaranāt siddham ity eva (cf. 17,8, vārtt. 9) | nanu coktam itsamjñāpraklptyartham etat syād iti (cf. 17.11), etc. etc. The philologically trained reader of the YD has therefore good reason for rejecting the sentence in question: most probably it is a marginal note that crept into the text in a direct predecessor of the Ahmedabad MS., whatever its relation to the Vākyapadīya verse may be.

2.3. Another type of quotation is equally deserving of attention. It is represented in the YD e.g. by the verse (22.12-13):

akke cen madhu vindeta kimartham parvatam vrajet işṭasyārthasya samprāptau ko vidvān yatnam ācaret.

This verse is also quoted in Vācaspatimiśra's Tattvakaumudī, though already on the first kārikā and not, as in the YD, in the commentary on kārikā 2, i.e. in a different context. ¹⁹ But Vācaspatimiśra's categorizing it as a *laukikānām ābhāṇakaḥ* is quite

¹⁷ It should be noted that there are also other 'formulae' used for taking up a previous argument (etc.).

¹⁸ With relationship of the YD to the Mahābhāṣya I shall deal elsewhere.

On this verse, and other works in which it is quoted, cf. S.A. Srinivasan, Vācaspatimiśras Tattva-kaumudī ..., Hamburg 1967, p.180. — On arka cf. my article 'A Note on Mahābhāṣya II 366.26: guṇasaṃ-drāvo dravyam (Studies on Mallavādin's Dvādaśāranayacakra II)' in Buddhism and Its Relation to Other Religions, Essays in Honour of Dr. Shozen Kumoi on His Seventieth Birthday, Kyoto 1985, fn.34.

evidently not provoked by the context, but merely by the contents of the verse itself and

perhaps by his knowing it as a 'popular saying, a proverb'.

In a case like this it is, of course, not reasonable to search for the source of the quotation, even though it cannot but ultimately have been composed by an individual author. On the other hand, it cannot a limine be excluded that the label 'proverb' is wrong or that the verse, or prose passage, became a 'proverb' only secondarily; nor should it be forgotten that a list of occurrences of (genuine) proverbs is a natural tool of any philology.

3. But my main concern is with two medical verses which are quoted in the YD on

Sāmkhyakārikā (12.12-15) and which read thus:

sarveṣāṃ vyādhirūpāṇāṃ nidānaṃ trividhaṃ smṛtam āhāraś ca vihāraś ca karma pūrvakṛtaṃ tathā | | tatrāhāravihārotthān rogān dravyam apohati yas tu karmakṛto vyādhir maraṇāt sa nivartate.

The quotation is introduced by aha ca, 'and [in accordance with that (i.e. what I stated just now)] it is said'; the particle iti is added only after a third verse which is also quoted,20 though separated from the two earlier ones by an inserted punar apy āha. The pair of verses is adduced as a vindication of the defensor's proposition preceding the $\bar{a}ha$ ca, viz. (YD 12.10f.): pratyakṣ a^{21} evaitad upalabhyate yad \bar{a} yurvedavihitasya kriyākramasyābhiyuktam ātmavantam bheşajabhişakparicārasampannam praty ānarthakyam, which in its turn is meant to answer the opponent's objections (clothed in a question and directed at the last part of the kārikā), viz. (12.9): katham etad avagamyate [] yad dṛṣṭasya hetor anaikāntikatvam anātyantikatvam ca 'how is it known (i.e. is there really a means-of-valid-cognition which proves) that the perceptible means [for removing the threefold suffering] are neither certain (i.e. by necessity efficacious) nor final (i.e. successful once and for ever)?' The answer given is this: 'It is in fact perceived directly that the course of actions (i.e. the medical treatment in its particular deliberate succession) prescribed by the Ayurveda is useless/does not achieve the desired object [even?] with regard to [a sick person] who is careful, possessed of self-restraint [and] has the [right] medicine, a physician and people to attend and nurse him'. And it is clear already at first sight why the two verses are quoted thereafter: not, of course, because the author of the YD wants to draw attention to an individual case or a particular kind of such a perception — which would result in an unnecessary redundance or overexplicitness, since everybody knows from his own experience that what he has said about the failure of medical treatment is true —, but because he wants to make an additional point, viz. to point out that the science of medicine itself not only admits the unreliability of the remedies it provides, but in fact recognizes a particular class of diseases to be by its very nature incurable and hence absolutely fatal!

²⁰ Viz. 12.17-18:

sopadravo sarvarūpo balamāmsendriyāpahah sāristas caiva yo vyādhis tam bhisak parivarjayet. This verse, too, still needs to be identified; see also below, fn.112.

²¹ This reading found in the Ahmedabad MS. is unfortunately not even mentioned in Pandeya's edition. His reading *pratyakṣa* can hardly be correct as the locative is obviously, i.e. according to the dictionaries, used only as a quasi-preposition.

Hence there seems to be little doubt that the two verses are quoted from a text belonging to Ayurveda literature, even though the expression ayurveda(vihitasya) does not (directly) refer to them and they are also perfectly clear in this regard.

3.1 Two expressions used in these verses, however, seem to call for closer inspection, viz. āhāra and vihāra.

3.1.1 As for the former, there can hardly be any doubt that it is only the meaning 'taking food' or 'food' which can be countenanced here. Both meanings are well attested. Thus āhāra e.g. of Manu 5.105 is explained by Medhātithi by simply adding pavitrāṇāṃ payomūlānām 'taking [viz. food] which, prepared from²² milk, serves as a means of purification', or (grāmya) āhāra of Manu 6.3 is taken to mean vrīhiyavamayam annam²³ by Medhātithi and similarly godhūmatilakādikam by Rāmacandra while Rāghavānanda, explaining the attribute only, gives the explanation kṛṣyādiyatnotpādyam (scil. bhakṣyam). But it is not always possible to decide with certainty whether in a particular case the expression āhāra is used to denote the action or its object: e.g. in the Manu verses referred to just now the commentator Manirama explains āhāra of 5.105 by havisyarūpaḥ, i.e. starts from the assumption that it means food or rather a particular kind of food, or Govindarāja in paraphrasing grāmya āhāra of M 6.3 by grāmodbhavā²⁴nnabhakṣaṇam shows that he regards it as a nomen actionis! As justly pointed out already by the Larger Petersburg Dictionary,²⁵ indigenous Indian grammarians are of the opinion that the meaning 'food' does not derive from the fact that the suffix is added to denote the object of the action (karman), but the apādāna, i.e. what normally is expressed by the ablative; for the author of the Kāśikā it even serves as the example for this function of the suffix ghañ, for in explaining Pān. 3.3.19 he says: āharanti tasmād rasam ity āhāraḥ 'āhāra is semantically equivalent to [the phrase] 'They (i.e. the living beings) take from it the rasa (the digestible part of food, i.e. that which the organism is able to utilize for itself)". Now, this looks like a very medical, scientific conception of food, so that one even feels justified in doubting whether in this case the grammarians have really been led by their feeling for language and not rather by their knowledge of Ayurvedic theories, for there is little likelihood that this expression was coined to render the rather complicated notion of 'that from which a living being or an organism takes what it needs as nutriment'; and as far as I can see \bar{a}/hr itself is also not used, at least not idiomatically, in a manner which would lend credibility to the explanation given in the Kāśikā. It is much more probable that Lingayasūrin hits the target when he paraphrases²⁶ āhāra by āhriyate, bhujyate, p.587, i.e. that his explanation in fact agrees with

²² Not 'with', as follows from Medhātithi's commentary on Manu 11.106, viz. his explanation of havişyam by payomūlaghṛtādi.

²³ Cf. also Kullūka (vrīhiyavādikam bhakṣyam) and Maṇirāma (vrīhiyavādibhakṣyam).

²⁴ Rāghavānanda's explanation kṛṣyādiyatnotpādyam is less open to misconstruction than that given by Govindarāja which could be taken to refer to provisions obtained in a village.

²⁵ Cf. also V.S. Apte's dictionary (the reference to the Siddhānta Kaumudī I was, however, not able to verify) as well as Pt. S. Ramasubha Sastri et al., *Kṛdanturū pamālā*, Madras 1971, p.1419.

²⁶ Amarakośa [I.] with the Unpublished South Indian Commentaries Amarapadavivţti of Lingayasūrin and the Amarapadapārijāta of Mallinātha, critically ed. ... by A. A. Ramanathan, Adyar: Madras 1971, p.587.

the idea normally connected with the word when used in the meaning of 'food',²⁷ but on the other hand it cannot be disputed that the interpretation offered by Jayāditya is equally possible in terms of Sanskrit word formation.

The next question which arises is whether or not $\bar{a}h\bar{a}ra = \bar{a}hriyate$ is semantically identical with 'food' as defined e.g. in *The New Penguin English Dictionary*: ²⁸ '(minerals, vitamins, etc. together with) material consisting essentially of protein, carbo-hydrate, and fat taken into the body of a living organism and used to provide energy and sustain processes (e.g. growth and repair) essential for life'. ²⁹ In this connection it is important to take note of a remark found in the Śabdastomamahānidhi, ³⁰ viz. *nīrāhārāś ca ye jīvā iti smṛtau jalapāne 'py āhāraśabdaḥ*, according to which 'the word *āhāra* is also used with reference to ³¹ the drinking of water', ³² and the śloka pāda quoted as an example — albeit from a text which I was not able to identify — contains a compound which indeed bears witness to this assertion, for *nīrāhāra* ³³ can only mean 'one whose *āhāra* consists of water (only)' and thus quite clearly demonstrates that water and other liquids can be subsumed under *āhāra*.

This observation is confirmed e.g. by Sarvajñanārāyaṇa who in his commentary on the Manu verse referred to already above, viz. 5.105, explains āhāra by brahmasuvarcalā pānādir duṣṭajalādipāne, or by Rāmacandra who (on the same verse) similarly equates āhāraḥ to jalapānādir.³⁴ In the light of this evidence 'food' seems to be too narrow a concept, a more correct equivalent being 'what is taken, i.e. received into one's body through the mouth.'³⁵

3.1.2. The second expression to be examined, viz. vihāra, is likewise used as an illustration in a grammatical work, or at least a grammatical context, viz. in a kārikā which

²⁷ See also the passage quoted below on p.136 from Śańkara's Gītābhāṣya.

²⁸ Harmondsworth 1986.

²⁹ Note that this definition is also primarily based on (the) science (of medicine) and not on common understanding of what food is.

³⁰ (A Sanskrit Dictionary) compiled by Śrī Tārānātha Bhaṭṭācārya, Varanasi 1967³. It is quite remarkable that Bhaṭṭācāryā confines himself to adding *iti smṛṭau* to this quotation although, according to Prafulla Mitra's 'Memoir' (p.XII) he e.g. 'had the entire Mahabharata committed to memory which was so extraordinaryly retentive that he could tell anybody offhand the contents of any Sanskrit book and particular pages there of wherein the subjects occurred.'

³¹ It should be noted that the locative can, in a case like the present one, not be rendered by 'in the meaning/sense of'.

³² Or 'drink of water', since jalapāna need not be a nomen actionis.

³³ Not listed in the dictionaries (as far as I can see).

³⁴ See also fn.56 and fn.81 below.

³⁵ Cf. in this regard also the common translation 'eat' for verbs seeming rather to mean 'take in' in modern Indian languages; see e.g. R.P.Das, 'Dravidischer Einfluß bei der Bildung neuindoarischer periphrastischer Passive? ...', StII 11/12, 1986, 15f.

Kauṇḍabhaṭṭa quotes in his Vaiyākaraṇabhūṣaṇasāra (on verse 46 of the *mūla*), qualifying it as a *vṛddhokti*,³⁶ and which reads thus:

upasargeņa dhātvartho balād anyatra nīyate³⁷ prahārāhārasaṃhāravihāraparihāravat

The commentators obviously³⁸ deemed this so clear that they unfortunately thought they could do without an explanation, and Kaundabhaṭṭa confines himself to demonstrating that this verse indeed supports the point he wants to make in discussing the various theories about *upasargas* and *nipātas*. But this does not really matter; for, what the primary nouns *prahāra*, āhāra, etc. are meant to illustrate is the *semantic difference* caused by the preverbs; therefore a commentator could only be expected to make clear this aspect, but not to discuss the various meanings each of these words has.

After all *vihāra*, in the verses from the YD, poses a problem in so far as none of the meanings listed in the dictionaries really seems to fit, except perhaps for that of 'walking for pleasure or amusement, wandering, roaming; sport, play, pastime, diversion, enjoyment, pleasure' (Monier-Williams). However, this clearly calls for a critical examination, and in this regard it is certainly useful to look for explanations of *vihāra* in commentaries of other works.

In as much as *vihāra*, too, can be used as a verbal noun, it is legitimate to take into account also another derivative, viz. *viharaṇa*, which is attested in Sāṃkhyakārikā 28 in an enumeration of the functions (*vṛtti*) of the five *karmendriyas*, i.e. 'faculties which serve action'. Since Īśvarakṛṣṇa also follows the yathāsaṃkhya-principle, there cannot be the least doubt that *viharaṇa* (no. 3 in kārikā 28cd) refers to *pāda* (no. 3 in kārikā 26 cd), i.e. that it denotes the function of the feet. Now the author of the YD explains *viharaṇa* as follows (p.1041.2): *viśiṣṭaṃ haraṇaṃ viharaṇam* | *ataś ca yad eva samavi-ṣamanimnonnatacaṅkramaṇaparivartananāṭyavyāyāmādiḥ sa indriyārtho nānyaḥ*. That is to say that the word denotes different kinds of what one does with one's feet, viz. walking, circumambulating (?), dancing, doing physical exercises, etc., on the various kinds of ground. Hence the aspect of pleasure is not totally absent, but is quite evidently not dominant, being merely one among many others. A semantic development e.g. from 'walking' to 'walking for pleasure', and even to 'enjoyment, pleasure' is therefore

³⁶ In the Vaiyākaraṇabhūṣaṇa the quotation is simply followed by *iti cānyaḥ* in order to make clear that it is not also a verse of Kumārilabhaṭṭa's like the two quoted before it (which are taken from the Tantravārttika on MS 1.3.33, ĀSS-edition II 250).

³⁷ Note the variant anyah pratiyate.

³⁸ This remark holds good for the compilers of the Kṛdantarūpamālā (cf. fn.25 above) too, cf. Upodghāta p.IX.

³⁹ Cf. karmārthānīndriyāņi karmendriyāņi (YD 99.15) [in contradistinction to buddher indriyāņi buddhīndriyāņi, 99.6f.].

⁴⁰ On which see H. Brinkhaus, 'Yathāsamkhya und versus rapportati', StII 7, 1981, 21-70.

⁴¹ Unless this latter meaning is derived from the elliptic use of *vihāra* 'passing away [the time]'. In any case it is important to take into account the narrower or wider context; in the Arthaśāstra, e.g., *vihāra* always means '(place of) recreation' (1.10.13; 1.19.14; 2.1.33; 2.2.3; 5.1.23 and 28; 7.15.22; 12.5.47; 13.2.45) or '(sportive) amusement, pleasure' (2.26.5; 3.3.21; 5.5.7; 13.5.8).

indeed possible. Hence it is not necessary to check the passages on which this entry is based; but it is imperative to recognize, and not to lose sight of, the fact that viharaṇa and vihāra are not basically connected with the idea of pleasure, amusement, play etc.

On the other hand, it is also possible that Iśvarakṛṣṇa, and following him the author of the YD, deliberately restrict the meaning of viharana for obvious reasons. The criticism directed by Jayantabhatta against the Sāmkhya conception of the karmendriyas, or to be more precise, against the feet as a karmendriya, is based on different considerations, for what he says is (II 379.8f.):⁴³ api ca viharaṇam api na kevalaṃ caraṇayugalakāryam, api tu jānūrujanghādisahitapādasampādyam api 'and in addition walking is also not only to be performed by [just] the pair of feet, but on the contrary, also something that is brought about by the feet in cooperation with the knees, thighs, the shanks, etc.' At least it has to be noted that in the Mahābhāṣya the following sentence is found (I 363.25f.): antareņa khalv api śabdaprayogam bahavo 'rthā gamyante 'kşinikocaih pāṇivihāraiś ca (cf. also I 388,4f.), where the compound pāṇivihāra can only mean 'movement, gesture of the hand(s) (used as signal)' (hastacestā).44 And it cannot simply be argued that the addition of the prior number is significant in that it shows that vihāra alone does not refer to a movement of the hands, for the qualification can likewise be accounted for by assuming that in the given context it was necessary to exclude movements of other parts of the body like the feet, etc. It is therefore at least probable that vihāra does not refer exclusively to 'functions' of the feet — as is in fact to be expected in view of the basic meaning of vi/hr 'to part asunder, keep apart, separate, to open'.45

However, it cannot be denied that the action primarily thought of in connection with the word *vihāra* and hence denoted by it is that of the feet, or rather legs, 46 although the movement of walking or marching etc. affects, of course, the body as a whole.

To adduce a few more pieces of evidence: Bhag.Gitā 11.42ab

yac cāvahāsārtham asatkrto 'si vihāraśayyāsanabhojaneşu 'and that you have not been shown due respect [by me] while walking, lying, sitting or eating [together with you] because I wanted to mock you', where Śaṅkara's explanation vihāraḥ pādavyāyāmaḥ is indeed to the point since Arjuna clearly has in mind rules about giving precedence to another person, walking behind a person of higher rank and similar 'rules of etiquette'.

⁴² That is to say $kr\bar{i}d\bar{a}$ as it is then usually paraphrased by commentators (cf. e.g. Cakrapāṇidatta on Caraka, Cikitsāsth. 20.41 or Ādityadarśana, Devapāla and Brāhmaṇabala on KāṭhGS 1.19 (C. Dreyer, Das Kāṭhaka-Gṛḥya-Sūtra ..., Stuttgart 1986, p.20). By way of a specialization of meaning vihāra can even have the meaning of surata; cf. e.g. the commentary called Lakṣmī on Sāhityadarpaṇa 3.110 (ed. by Āchārya Kṛṣṇamohan Śāstrī, Varanasi 1967, p.149), Śukranīti 3.112 (kuryād vihāram āhāraṃ nirhāraṃ vijane sadā).

⁴³ Reference is to Vol. II of the edition (MORIS 139) by K.S. Varadacharya, Mysore 1983.

⁴⁴ This is the explanation given by Cārudeva Śāstrī in his Upasargārthacandrikā, Vol. 3, Delhi—Varanasi 1979, p.419; cf. Nāgojībhaṭṭa's Uddyota (NSP-edition), II 378 b 1.

⁴⁵ Cf. e.g. RV 10.162.4 and AiBr 2.35 (= Adhyāya 10.3). — Cf. also Pāṇini 1.3.41 (veḥ pādaviharaṇe).

⁴⁶ As rightly pointed out by Jayanta!

Another very interesting passage is Matsyapurāṇa 184.21cd-23ab:⁴⁷ aṣṭau māsān vihāraḥ syād yatīnāṃ saṃyatātmanām ekatra caturo māsān vārṣikān nivaset punaḥ | | avimukte⁴⁸ praviṣṭānāṃ vihāras tu na vidyate na deho bhavitā tatra dṛṣṭaṃ śāstre purātane;

for it testifies to the fact that $vih\bar{a}ra$ is used — in stark contrast to its meaning 'monastery' — to denote precisely the opposite, i.e. the specific activity of mendicant ascetics during the rest of the year, their homeless 'roaming about'. 50 It is noteworthy that more than just the constant movement on foot is here at least implied.

In a metaphysical and slightly extended meaning $vih\bar{a}ra$ is used in the Yogabhāṣya (on YS 4.10), viz. the passage⁵¹ ye caite maitryādayo dhyāyināṃ vihārās ..., which should certainly not be rendered — as it was by Woods⁵² — by 'as for friendliness and such [exalted states-of-mind], they are the diversions⁵³ of contemplative [yogins]', but rather by '... are the activities [of the mind-stuff] of [yogins] practising meditation', for the explanation given by the author of the Pātañjalayogaśāstravivaraṇa (330.22f.), vihārāḥ [=] cittavyāpārāḥ, ceṣṭāni is highly convincing indeed.⁵⁴

⁴⁷ In the edition by Pañcānana Tarkaratna, Calcutta 1891; it is 183.21ff. in *Matsyapurāṇa*, Text in Devanāgarī, Translation and Notes in English, Foreword [and Translation!] by H. H. Wilson. Arranged by N.S. Singh, Delhi 1983.

⁴⁸ On this place name see e.g. V.S. Apte's dictionary.

⁴⁹ I wonder how vihāra became to denote 'monastery'; I doubt whether this is a specialization of the meaning 'place of residence' because, at least originally, it served as a temporary abode only. Monier-Williams' explanation ('originally a hall where the monks met or walked about') is also not really convincing; and 'place of recreation, pleasure, amusement' can certainly also be excluded. I should like to propose that it is derived from (kālam) vi√nṛ, 'to pass away [the time]', i.e. that it originally denoted a place where monks, and nuns, spent the rainy season, i.e. the time during which they could not roam about; cf. the semantically closely related middle Indic expression lena (< Skt. layana), 'place where an animal cowers [for shelter]' = 'burrow hole, den' and 'place where monks take shelter [during the rainy season' > 'monastery'. Sukumar Dutt's explanation of the term lena is, however, entirely different (Buddhist Monks and Monasteries of India, their History and their Contribution to Indian Culture, London 1962, p.93); on the other hand this book contains many pieces of information which seem to support at least my interpretation of vihāra (cf. pp.58f., 93 and particularly 94 {'The original purpose of a vihāra was apparently to provide shelter from inclemencies of weather and noxious things — they were no more than shelters for monks to dwell in for vassāvāsas'}). Cf. also his book Early Buddhist Monachism, (2nd rev. ed.), London 1960, pp.99ff. and 150ff.

⁵⁰ Cf. the expression nivaset and avimukte pravistānām clearly in contrast to vihāra.

⁵¹ According to Vācaspatimiśra this is a statement of the ācāryaḥ quoted in the Bhāṣya.

⁵² The Yoga-System of Patañjali..., (HOS 17), repr. Delhi-Varanasi-Patna 1966, p.309.

⁵³ The italics are mine.

⁵⁴ In this connection Aruṇadatta's characterization of vihāra as vāgdehamanaśceṣṭālakṣaṇa should be noted (Aṣṭāṅgahṛdaya, Śārīrasth. 3.44).

'Movement [of the body],55 but first of all of the feet', is hence a meaning of vihāra that is not only well-attested, but seems also quite suitable for the context of the two verses under discussion. 'Mode of life', an equivalent found e.g. among others in the Pali-English Dictionary of Rhys Davids und Stede, clearly suffers from being too broad, and inexact, a meaning. For, closely connected with the expression āhāra as vihāra is in our verses, it cannot by any means denote a concept which already by itself quite naturally includes the manner of eating. The syntagma āhāraś ca vihāraś ca of the second line of the two verses at issue⁵⁶ almost gives the impression of being the vigraha,⁵⁷ the separation of the corresponding dvandva compound āhāravihārau. In fact the compound āhāravihāra occurs quite frequently especially in Ayurvedic texts; both words are often mentioned together, either by themselves or as parts of a larger compound or series of expressions, so that one feels tempted to assume that the concepts denoted by them are in fact closely connected with or even supplementary to each other. But one should not count one's chickens before they are hatched, i.e. one should first take a closer look at some at least of the relevant passages⁵⁸ in order to find out in which of its numerous meanings the word vihāra is in fact used in the Āyurveda, and whether the meaning is the same in all cases.

At Caraka, ⁵⁹ Vimānasth. 8.92-93 it is said — in the context of dealing with 'certain topics (viz. ten factors) [to be examined] for the knowledge of physicians (i.e. by the physicians in order to know more about the patient)' (kānicit prakaraṇāni bhiṣajāṃ jñānārtham: 68, cf. 84) among which figures also deśa: deśas tu bhūmir āturaś ca | tatra bhūmiparīkṣā — āturajñānahetor vā syād auṣadhaparijñānahetor vā | tatra tāvad iyam āturaparijñānahetoḥ | tad yathā — ayaṃ kasmin bhūmideśe jātaḥ saṃvṛddho vyādhito vā; tasmiṃś ca bhūmideśe manuṣyāṇām idam āhārajātam, idaṃ vihārajātam, idam ācārajātam; ⁶⁰ it looks very much as though the various physical activities of people, as such activities are specific to a particular place or region, are here set off against cooking and drinking, on the one hand, and conduct and manners, on the other. A somewhat

⁵⁵ Cf. also the expression niśāvihārāḥ, referring to grahāṇāṃ paricārakāḥ, at Suśruta, Uttarat. 60.22, which is explained in the context itself, viz. by niśācarāṇām (teṣāṃ hi ye ...) in the subsequent verse. Palhaṇa paraphrases the former by rātrau bhramaṇaśīlāḥ; cf. also Cakrapāṇidatta's explanation of viharantam (at Caraka, Çikitsāsth. 21.4) by vicarantam.

⁵⁶ It is attested to also elsewhere, e.g. at Aṣṭāṅgaḥṛdaya, Śārīrasth. 3.44. — In his commentary on this passage Aruṇadatta qualifies āhāra as pānāśanādilakṣaṇa (the °ādi perhaps referring to licking etc.).

⁵⁷ On this term see P. Thieme, 'Meaning and form of the "grammar" of Pāṇini', StII 8/9, 1982/83, pp.29ff.

⁵⁸ Most of them were kindly pointed out to me a couple of years ago by Dr. R.P. Das.

⁵⁹ The edition used by me is that of Jādavaji Trikamji Āchārya, NSP: Bombay 1941³.

⁶⁰ In The Caraka Saṃhitā ..., ed. and published in six volumes ... by Shree Gulabkunverba Ayurvedic Society, Jamnagar 1949, this is translated as follows (II 928): '... such and such are the articles of diet used by the people; and such their modes of exercise and customs'. Priyavrat Sharma, Caraka-Saṃhitā, Agniveśa's treatise refined and annotated by Caraka and redacted by Dṛḍhabala ..., 2 vols., Varanasi—Delhi 1981, renders it thus: '... in that type of land the people mostly have such diet, behaviours, conduct ...'. A parallel is Aṣṭāṅgas., Sūtrasth. 23; cf. also the compound āhāravihāropacāra(paricchadāḥ) at Caraka, Śārīrasth. 8.14 and Aṣṭāṅgas., Śārīrasth. 1.

different picture presents itself if the initial part of the kuṣṭhanidāna⁶¹ of the Suśruta is compared with its parallels in the Aṣṭāṅgahṛdaya, and Aṣṭāṅgasaṃgraha⁶², for what corresponds to Suśruta,⁶³ Nidānasth. 5.3 mithyāhārācārasya(,) viśeṣād guruviruddhā-sātmyājīrṇāhitāśinaḥ ... yo vā ... tasya pittaśleṣmāṇau prakupitau ...⁶⁴ in the Aṣṭāṅgahṛdaya⁶⁵ is Nidānasth. 14.1f.

mithyāhāravihāreņa viśeṣeṇa virodhinā sādhunindāvadhānyasvaharaṇādyaiś ca sevitaiḥ | | pāpmabhiḥ karmabhiḥ sadyaḥ prāktanaiḥ preritā malāḥ ...,66

and this would seem to indicate that *vihāra* and *ācāra* are semantically so closely related (as regards a particular part of their respective semantic fields) that they can be interchanged (in this regard). Gayadāsa strikingly confirms this observation in that he explains in his commentary on the Suśruta passage: (mithyāśabdaḥ āhārācārābhyāṃ saha pratyekam abhisambadhyate | tatra dvādaśāśanapravibhāgoktavidhiviparītavidhir mithyāhāraḥ |)⁶⁷ ācāraḥ kāyavāimanobhedena trividho vihāraḥ | tasya svasthavṛttānāgatābādhavidhānād anyathākaraṇaṃ mithyācāraḥ It should also be noted that Toḍara in his commentary on the passage quoted just now from the Aṣṭāṅgahṛdaya offers an explanation of vihāra which is in remarkable agreement with that given by Gayadāsa for ācāra, viz. mithyāvihāreṇa [=] hiṃsāsteyādikena kāyavānmānasena prāṇyupaghātaparuṣavacanāniṣtavartinā. According to both these commentators vihāra means 'activity' of the (age-old) triad of 'body, speech and thought', and this is a very interesting piece of information no matter whether the activity is considered to be wrong (mithyā) for ethical or for medical reasons, since it permits one to assign (tentatively) to vihāra the meaning 'habitual or occasional behaviour' — and the lexical content is thus indeed in accordance

⁶¹ Cf. on this also R.E. Emmerick, 'Some Remarks on the History of Leprosy in India', *Ind. Taur.* XII, 1984, 93-105 as well as 'Die Lepra in Indien' in *Aussatz . Lepra . Hansen-Krankheit, Ein Menschheitsproblem im Wandel, Teil II: Aufsätze*, hrsg. v. J.H. Wolf, Würzburg 1986, pp.185-199.

⁶² Reference is to the edition by A.D. Āṭhavale, Poona 1986.

⁶³ Reference is to the edition by Jadavaji Trikamji Āchārya, NSP: Bombay 1916.

⁶⁴ Dalhaņa explains: śāstroktavidhibhraṣṭāhārācarasya.

⁶⁵ Reference is to the edition by Aṇṇā Moreśvar Kuṇṭe, NSP: Bombay 1925⁵.

⁶⁶ = Aṣṭāṅgasaṃgraha, Nidānasth. 14.2f.

⁶⁷ As kindly pointed out to me by Dr. R.P. Das, the implicit reference is to Suśruta, Uttarat. 64.53 (or 56 in the edition used by G.J. Meulenbeld, *The Mādhavanidāna and it Chief Commentary* ..., Leiden 1974, p.344 fn.4, where the latter passage is translated).

⁶⁸ The bolding is mine.

⁶⁹ Quoted l.c. by the editor in the sixth edition of the work — NSP: Bombay 1939 — mentioned in fn.65; on the MS. used see no. 32 on p.15 of the Sūcīpatra section of this edition.

⁷⁰ See fn.54 above; cf. also Aruṇadatta on Aṣṭāṅgahṛdaya, Nidānasth. 1.6 (quoted in Nīlamegha's Tantrayuktivicāra on 2 (ed. N.E. Muthuswami, Trivandrum 1976, p.3): vihāraś ca tasminn eva kaphaje jvare dehamanovyāpāroparamah.

with that of $\bar{a}c\bar{a}ra$ as the latter too seems to be explained within the context itself of the passage from the Suśrutasaṃhitā, viz. by snehapītasya vāntasya vā vyāyāmagrāmyadharmasevino 'of one who performs physical exercises or has sexual intercourse [immediately] after partaking of an oleaginous substance or after vomiting', and by yo vā majjaty apsūṣmābhitaptaḥ sahasā chardir vā pratihanti 'or who unwisely takes a bath in [cold] water after an exposure to heat or who forcibly suppresses [any nature urge] for vomiting'. Admittedly, sexual intercourse, a refreshing bath, and even killing of other living beings does in fact or can give pleasure, but clearly the aspect of amusing oneself, indulging in a particular action, is 'noematisch' not relevant⁷¹ here; but it is not for that reason alone that Hilgenberg and Kirfel's rendering of vihāra in this Aṣṭāṅgahṛdhaya passage⁷² by 'Tätigkeit' is not entirely satisfactory.

Another of the ten topics of Caraka, Vimānasth. 8.68 and 84 already mentioned above, are 'the characteristics⁷³ of (< consisting in) physiological parent state etc.' which the author explains in 8.95: (tatra prakṛtyādīn bhāvān anuvyākhyāsyāmaḥ |) tadyathā — śukraśoṇitaprakṛtiṃ, kālagarbhāśayaprakṛtim, āturāhāravihāraprakṛtiṃ, mahābhūtavikāraprakṛtiṃ ca garbhaśarīram apekṣate. One has, of course, to read 'prakṛtiṃ mātur āhāravihāraprakṛtiṃ, ⁷⁴ which means '(the organism of the embryo depends, for its own development, on) ... the kind of food (or more precisely: what the mother takes into her body) and behaviour/activities of the mother'

This passage it is that Cakrapāṇidatta may have had in mind when he explains samyagupacāraiḥ of Caraka, Śārīrasth. 3.3 (yadā ... tadā garbho 'bhivartate, sa sātmyarasopayogād arogo 'bhivardhate samyagupacāraiś copacaryamāṇaḥ ...) quite convincingly by garbhahitair āhāravihāraiḥ, and he need not add mātur, or a similar expression, in order to make clear what he wants to say, viz. that the growth of the embryo is not impaired when the mother takes proper care of it by eating and drinking only what is salutory to it and by avoiding all activities that might be detrimental to it.

In a similar way a dependence is — again in principle correctly — seen between the $\bar{a}h\bar{a}ra$ and $vih\bar{a}ra$ of a wet-nurse, or more generally a breast-feeding woman, and the quality of her milk; cf. e.g. Suśruta, Śārīrasth. 10.32ff.:

dhātryās tu gurubhir bhojyair viṣamair doṣalais tathā doṣā dehe prakupyanti tataḥ stanyaṃ praduṣyati. | | mithyāhāravihāriṇyā duṣṭā vātādayaḥ striyāḥ dūṣayanti payas tena śārīrā vyādhayaḥ śiśoḥ | | bhavanti kuśalas tāṃs ca bhiṣak samyag vibhāvayet.

Here too vihāra is clearly not used in the meaning of 'pleasure' or 'amusement', and therefore one will accept K.K. Bhishagratna's⁷⁵ rendering as (basically) correct, viz. 'of

⁷¹ On this term and the semantic theory with which it is connected, cf. K. Hoffmann, *Der Injunktiv im Veda*, Heidelberg 1967, pp.37ff.

⁷² L. Hilgenberg and W. Kirfel, Vāgbhaṭa's Aṣṭāṅgahṛdayasaṇhitā ..., Leiden 1941, p.270.

⁷³ According to Cakrapāṇidatta *prakṛti* is here equivalent to *svabhāva*.

⁷⁴ This is also evinced by Cakrapāṇidatta's explanation (... evaṇ garbhāśayasthaś ca doṣaḥ); mātur āhāra-vihārau tatkālīnau yaddoṣakaraṇasvabhāvau

⁷⁵ An English Translation of the Sushruta Samhita ..., Varanasi 1963, vol. II, p.228.

a woman, vitiated owing to injudicious and intemperate eating and living'. His interpretation of $mithy\bar{a}^\circ$ is also quite convincing, and he, of course, starts from the assumption that this member of the compound has likewise to be construed with $vih\bar{a}ra$ too — as explicitly stated by Gayadāsa on the passage from the Suśrutasaṃhitā just quoted.

At Aṣṭāṅgahṛdaya, Uttarasth. 1.17ab the following recommendation is met with: hitāhāravihāreṇa yatnād upacarec ca te

(i.e. the two wet-nurses one should employ if the mother herself is not able to feed her baby). The translation proposed by Hilgenberg and Kirfel⁷⁷ 'diese pflege man sorgfältig mit zuträglicher Nahrung und Erholung' is somewhat problematic; apparently they did not recognize that *hita*° qualifies °vihāra as well as āhāra° just as mithyā° does in the other cases; 'salubrious way of living' does not, however, mean here 'recreation' or 'rest', but 'keeping bodily activities within certain [limits in order to avoid any decrease of the "milking capacity" or any deterioration of the quality of the milk'].

A further and particularly clear confirmation of the foregoing determination of one of the meanings of *vihāra* is provided by Suśruta, Cikitsāsth. 30.5 in so far as *somavad* āhāravihārau vyākhyātau, said in connection with prescriptions about the use of certain medicinal plants, must refer to the preceding adhyāya (29). And this latter contains a detailed description of the treatment, behaviour, diet etc. of a patient who has taken one of the *somarasāyanas* in the course of the many weeks of his developing a 'new body' (navā tanuḥ, 29.14). Therefore, K.K. Bhishagratna's translation 'the regimen of diet and conduct is the same as in the case of Soma' is fully justified.

At Caraka, Indriyasth. 1.3 a number of factors are enumerated which a physician should examine if he wants to determine a patient's remaining span of life, and among them $\bar{a}h\bar{a}ra$ and $vih\bar{a}ra$ are also mentioned. Although that latter topic does not seem to be dealt with in detail in the Indriyasthāna, it is, I think, not unreasonable to assume that the expression $vih\bar{a}ra$ is used in a meaning identical with that which it has in the Ayurveda passages discussed in the foregoing, and hence to accept Priyavrat Sharma's rendering ('diet, activities') as the one most probably correct and to reject that found in the edition and translation of the Shree Gulabkunverba Ayurvedic Society ('his diet, recreation').

For the same reason H.H.M. Schmidt's translation⁸⁰ of the compound *pānāhāravi-hārabheṣajaṃ*⁸¹ occurring in verse 102(ff.) of the Yogaśataka ascribed to Nāgārjuna by

⁷⁶ The italics are mine.

⁷⁷ Op. cit. (cf. fn.72), p.518.

⁷⁸ Op. cit. (cf. fn.75), p.541.

⁷⁹ Oddly enough this idea is not even mentioned by Cakrapāṇidatta in his commentary on this passage and therefore no reference is given either.

⁸⁰ Das Yogaśata, Ein Zeugnis altindischer Medizin in Sanskrit und Tibetisch, hrsg. u. übersetzt ..., Bonn 1978, p.213.

⁸¹ Note that here $p\bar{a}na$ is mentioned separately, and not subsumed under $\bar{a}h\bar{a}ra$.

'Trank-, Nahrungs- und Vergnügungsmedizin'⁸² cannot be considered a successful attempt to render the original; no doubt J. Filliozat's⁸³ 'médication par boisson alimentation et manière de vivre' is decidedly much nearer the point. Obviously the remedies referred to here correlate to corresponding causes, or types of causes, of diseases; in this connection Siddhasāra⁸⁴ 5.2 and 9.1 should also be mentioned, since, respectively, particular doṣas are stated there to be 'mithyāhāravihārotthāḥ'⁸⁵, and 'the wind etc.' to be excessively disturbed (duṣṭa) 'mithyāhāravihārataḥ'!

But there are passages where one cannot be as sure as in these last cases, or where vihāra is quite evidently used at least in the meaning 'pleasant, amusing activity' if not

directly 'pleasure, amusement' etc.

An interesting paragraph (12) of Caraka, Śārīrāsth. 5 is devoted to an explication of 'the means of ascending of those desirous of liberation' (mumukṣūṇām udayanāni); the lengthy list that is given in this paragraph also comprises suptasthitagataprekṣitāhāra-vihārapratyaṅgaceṣṭādikeṣv ārambheṣu smṛtipūrvikā⁸⁶ pravṛttiḥ; in view of gata° 'going, moving', one hesitates to assume that vihāra means 'bodily activity' here, but 'pleasure' etc. is evidently excluded. It would appear that two traditional 'prefabricated' chains have been stringed together here, one made up of past participles used as verbal nouns and the other of primary nouns, and what is meant by vihāra, in contradistinction to 'food' and to the 'movement of minor limbs of the body', is most probably the remaining activities of the body, such as urinating, defecating etc.⁸⁷

In the description of various types of sattva at Caraka, Śārīrasth. 4.36ff., however, expressions like ambhovihārarati (37.5), sukhavihāra (37.6), strīvihāra (37.7), vikṛtāhāravihāraśīla (38.3) or āhāravihārapara (35.6) are to be interpreted in the light of Cakrapāṇidatta's explanation vihāraḥ [=] krīḍā. That is to say, it has to be admitted firstly that vihāra can be used even in Āyurvedic texts to denote ways and doings which are first of all thought of as giving pleasure, and, secondly, that this holds good of the word too when it forms a compound together with āhāra. This compound as such cannot hence be regarded as an absolutely reliable indication of vihāra meaning 'walking, bodily activity' etc.

⁸² The fact that the Tibetan translator renders vihāra by gnas does not, as Schmidt thinks, warrant the conclusion that he took it to mean 'Aufenthaltsort'; it is either the stereotypical equivalent of this word (if it does not mean 'monastery') or an abbreviation for gnas lugs, 'position' (etc.).

⁸³ J. Filliozat, Yogaśataka, Text médical attribué à Nāgārjuna, Pondichéry 1979, p.107.

⁸⁴ Cf. R.E. Emmerick, The Siddhasāra of Ravigupta. Vol.1: The Sanskrit Text, Wiesbaden 1980.

The Tibetan translation (for which see R.E. Emmerick, *The Siddhasāra of Ravigupta, Vol.2: The Tibetan Version with Facing English Translation*, Wiesbaden 1982, pp.84f. and 180f.) adds an explanation (in both cases), viz. 'wrong positions such as (wrong way of) sitting and lying down'.

⁸⁶ Is this due to Buddhist influence or do we have to do here with a common trait of the Indian ascetic-meditative tradition?

⁸⁷ Cf. the explanation of the commentator on verse 101 of the Yogaśataka (Filliozat, op. cit., p.150), vi-hāro viņmūtrādyutsargaḥ. This meaning is alternatively taken into consideration also by Cārudeva Śāstrī, Upasargārthacandrikā (cf. fn.44), p.418. Note, however, that at Caraka, Siddhisth. 11.30 (akālanirhāravihārasevin) the malādinirgama (Cakrapāṇidatta) is expressed by nirhāra; a parallel is found at Aṣṭāṅgas., Sūtrasth. 27.

Nevertheless there are passages in non-Āyurvedic texts too in which no other choice can reasonably be made. What I have in mind is e.g. Bhag.Gītā 6.17

yuktāhāravihārasya yuktacesṭasya karmasu

yuktasvapnāvabodhasya yogo bhavati duhkhahā,

and the relevant part of Śaṅkara's commentary on this verse, viz. āhriyata ity āhāraḥ [=] annaṃ, viharaṇaṃ vihāraḥ [=] pādakramaḥ, tau yuktau niyataparimāṇau yasya saḥ yuktāhāravihāraḥ tasya, tathā yuktaceṣṭasya [anyā ca] yuktā niyatā ceṣṭā yasya karmasu tasya. For, just as in the case of Caraka, Śārīrasth. 5.12 the fact that the compound under discussion and a second compound containing the word ceṣṭā are juxtaposed does not by any means warrant the conclusion that it cannot therefore have the meaning 'walking', all that has to be assumed is that ceṣṭā refers to other activities of the body, and this is expressed in the Caraka passage by the prior member pratyaṅga°, and suggests itself quite naturally in the verse from the Bhagavadgītā too, as is also shown by the secondary explicatory addition of anyā ca.

Or consider Medhātithi's commentary on Manu 1.96, in which he takes $bh\bar{u}ta$ to refer to plants like trees etc. and animals like worms, insects (?) $(k\bar{t}ta)^{88}$ etc., but explains $pr\bar{a}nin$ — and the $pr\bar{a}ninah$ are said to be the relatively best among the $bh\bar{u}tas$ by Manu— by $\bar{a}h\bar{a}ravih\bar{a}r\bar{a}dicest\bar{a}samarth\bar{a}h$ 'those [among them] who are able to eat food and to perform movements like walking etc.'.

Finally, the sentence dṛśyante ca prāṇināṃ kālānurūpāḥ svabhāvāhāravihāravyavasthāḥ, found at YD 131,12, has undoubtedly to be classed with this group too.

By way of summary it has to be emphasized that none of the entries found in special dictionaries or glossaries of technical terms of the Āyurveda s.v. vihāra fullfils the requirement of being comprehensive (i.e. distinguishing the various meanings) as well as of being precise (i.e. specifying the individual meaning). Thus, the author of the Vaidyaka-Śabdasindhu⁸⁹ confines himself to quoting the Medinīkośa (ceṣṭāyām, bhramaṇe); in the glossary attached to vol. VI of the edition and translation of Caraka by the Shree Gulabkunverba Ayurvedic Society⁹⁰ all that is given is the explanation gamanabhramaṇādiśārīraceṣṭā, and with reference to just one passage (Śārīrasth. 2.29) at that; and the Āyurvedīya Mahākośa⁹¹ does not contain more than the remark kāyavihāraś caturvidhaḥ gamanacaṅkramaṇasthānāsanabhedena, which is in fact merely a part of Dalhaṇa's explanation of viharet at the very end of Suśruta, Cikitsāsth. 29,10, although it has to be admitted that the remark is of no little significance: what Dalhaṇa seems to have in mind when he states that the particular vihāra referred to in the text is a kāyavihāra, is the threefold division of body, speech and thought⁹², and his

⁸⁸ On kīṭa cf. also R.P. Das, Das Wissen von der Lebensspanne der Bäume, Surapālas Vṛkṣāyurveda, Stuttgart 1988, p.265.

⁸⁹ Compiler Kavirāja Umeśachandra Gupta. Revised and enlarged 2nd ed. by Kavirāja Nagendra Nātha Sena, Varanasi—Delhi 1983³, p.990.

⁹⁰ See fn.60 above.

⁹¹ Āyurvedīya Mahākośaļı arthāt Āyurvedīya Śabdakośa ..., Sampādakau Veņīmādhavaśāstrī Jośī, Nārāyaņa Harī Jośī, Bombay 1968, p.779.

⁹² Cf. p.139 and footnotes 54 and 70 above.

distinction of the four kinds of 'bodily activity', viz. 'going, marching,⁹³ standing and sitting (down)', is, of course, likewise worthy of note.

Only the lemma in the 'Index Sanskrit' added to J. Filliozat's edition and translation of the Yogaśataka⁹⁴ testifies to a capacity of making distinctions, for it reads thus: 'situation, conditions extérieures (de l'organisme), manière de vivre, hygiène générale ...'.

I on my part should like to propose, in view of the evidence discussed in the foregoing, to enlarge the entry on *vihāra* in our Skt. dictionaries by inserting: 'bodily movements, especially going and walking, but also other kinds; activity/activities not only of the body, but also of speech and mind > way of living, mode of life (excluding eating and drinking).'

3.2 Of course what I am aiming at is the argument that $vih\bar{a}ra$ — in the two verses of the YD which have provoked the rather lengthy discussion making up paragraph 3.1. — is used in the meaning determined in the foregoing and just described by way of summary. Hence I should like to propose the following translation:

'All the various types of diseases have a threefold cause, as is known from trustworthy tradition, [viz.] 1) what is taken into the body through the mouth, and 2) the bodily activity/mode of life and 3) the deeds done previously/in a former birth. Among these the diseases arising from what is taken into the body and from bodily activity/mode of life are removed by a drug; but a disease which is caused by [former] deeds, comes to an end [only] because of the death [of the person suffering from it].'

Quite evidently the dichotomy of curable *versus* incurable diseases⁹⁵ underlies this threefold distinction. As regards the particularly interesting distinction of two different causes of — in principle — curable diseases, viz. āhāra and vihāra, attention may first be drawn to some of the passages mentioned in the preceding paragraph, viz. Śuśruta, Śārīrasth. 10.32ff. and Siddhasāra 5.2 as well as 9.1. In addition two verses quoted in the Bhāṣya on the Rasavaiśesikasūtra should also be considered.

The first one reads thus (on 1.83):

vihārāhārahetūnām rtukālopajanmanām doṣāṇāṃ śamanārthāya svasthakarma vidhīyate || śayanasthānagamanasnānapānāśanādibhiḥ, while the second is the following vaṃśastha (on 1.2):

vipakvabhojī pratikāraņe (ra)to hitāni cānnāni samācaran (mitam) asāhasaṃ karma samācaran sadā śataṃ samā jīvati mānavaḥ sukhī.

⁹³ It seems that the intensity expressed does not refer to the speed, but to the distance and the manner of walking.

⁹⁴ P.150 (cf. fn.83 above)

The dichotomy taught by Dārila in his commentary on Kauśika-sūtra 25.2, quoted by S. Dasgupta, History of Indian Philosophy II, Cambridge 1965, p.275, viz. dviprakārā vyādhayaḥ āhāranimittā aśubhanimittāś ceti | tatra āhārasamutthānām vaiṣamya āyurvedam cakāra (recte: āyurvedaḥ carakādipranītaḥ śamanārthaḥ) adharmasamutthānām tu śāstram idam (viz. the Atharvaveda) ucyate, is basically not different, and cannot simply be put aside as a mere fabrication meant to explain the existence of both, the Atharvaveda and the Āyurveda (forming the upaveda of the former). (My attention was kindly drawn to this passage in Dasgupta's work, and to passages from the Suśrutasaṃhitā and the Aṣṭaṅgasaṃgraha about a threefold division of diseases discussed below, by G.J. Meulenbeld in a letter dated 14 June 1987).

The first verse bears further witness to the idea that *vihāra* and *āhāra* have in fact been regarded, though among other factors, as causes of 'disturbances', and the second one, though the two expressions are not used in it, confirms the existence of the idea that by observing a proper diet and by not overstraining oneself one lives as long as what is believed to be the ideal span of life (a hundred years), i.e. that one does not fall ill and die an untimely death.⁹⁶

The central importance which food has for the preservation of health is stressed also at Caraka, Sūtrasth. 25.31.: hitāhāropayoga eka eva puruṣavṛddhikaro bhavati, ahitāhāropayogaḥ punar vyādhinimittam. And in the same text the idea is expressed that a hitabhojana lives a hundred years (Sūtrasth. 27.348; cf. 342ff.); the opposite idea, i.e. that among other faults an annadoṣa leads to death (of Brahmins) is known to Manu (cf. 5.4 and 5ff.).

As for bodily activity, in the verse from the commentary on the Rasavaiśeṣikasūtra one aspect only is emphasized; the other aspect, however, viz. that such activity, nay even exertion is — physiologically — necessary, is given its due in a verse occurring in the Kāśikā on Pāṇ. 6.1.63⁹⁷ viz:

vyāyāmakşuṇṇagātrasya padbhyām udvartitasya ca vyādhayo nopasarpanti vainateyam ivoragāḥ. 98

In a similar manner further evidence will now be presented for the third cause, i.e. the idea that *karman*, too, exercises influence on the physical condition of man, although in this case also I cannot offer more than some material I have come across by chance since I have not had the time necessary for systematic search or comprehensive reading.

To all appearances, the expression kṣetriya, taught by Pāṇini in a nipātanasūtra (5.2.92), and stated by him to be equivalent to the syntagma parakṣetre cikitsyaḥ 'curable [only] in another dwelling/living-place [of the soul] (i.e. another body in the next birth)', has to do with the idea that certain diseases are by necessity fatal and that they are caused by karman, for the conception of a disease, in the proper sense of the word, which can only be cured after death in the next life would in itself be very strange indeed.

In other sources *karman* is regarded as a cause of diseases, or particular diseases, but no specification is given as to their character, i.e. severeness. Thus at Rasaratna-samuccaya 1.25 the importance of *rasa* is highlighted by stating:

hanti bhakşanamātrena pūrvajanmāghasambhavam rogasangham aṣeśānām narārām nātra saṃśayaḥ;

⁹⁶ Cf. also Caraka, Śārīrasth. 2.46: naro hitāhāravihārasevī ... bhavaty arogaḥ.

⁹⁷ I am grateful to Mr. Mahes Raj Pant, Kathmandu, for drawing my attention to it.

⁹⁸ Note that the construction is anacoluthic.

⁹⁹ Cf. Kāśikā on P. 5.2.92: ... kṣetriyaṃ kuṣṭham (cf. fn.61 above) / parakṣetram [=] janmāntaraśarīram, tatra cikitsyaḥ kṣetriyaḥ / asādhyo 'pratyāklyeyo vyādhir ucyate / nāmṛtasya nivartata ity arthaḥ. Note that this is merely one of four different explanations offered, all of which, however, are stated to be 'authoritatively valid' (sarvaṃ caitat pramāṇam).

it should be noted that it is the central aim of Indian alchemy to create a 'new body', i.e. ultimately to overcome death. 100

The compound $p\bar{a}paroga$ (e.g. Manu 5.164) — its derivative $p\bar{a}parogin$ is also attested e.g. Manu 3.92 and 159 — is commonly taken to be a $karmadh\bar{a}raya$, but as the diseases referred to (according e.g. to the commentators on Manu) are ultimately incurable ones like $kustha^{101}$ and ksaya ('decline'), it is worth considering whether it should not perhaps be analyzed as a tatpurusa, viz. $p\bar{a}p\bar{a}d$ rogah. At least, Manu himself clearly distinguishes (11.48) between a $r\bar{u}paviparyaya$ 'in consequence of crimes committed in this life' (duscaritaih) and 'in consequence of those committed in a former [existence]' ($p\bar{u}rvak_{r}taih$), 102 and it is most probable that this verse, and those following upon it, were regarded by Bühler 103 as justifying the translation of $p\bar{a}parogin$ (e.g. at 3.92) by 'those afflicted with diseases that are punishments of former sins'. That adharma is the cause ($k\bar{a}rana$, nimitta) of diseases is an idea with which also Medhātithi, Govindarāja and Kullūka were familiar (cf. e.g. their commentaries on Manu 1.83). 104

Finally, the tripartition of the causes of diseases deserves consideration. Various threefold classifications of diseases (as such) are found in medical texts e.g. at Suśruta, Sūtrasth. 24.4 the division of duḥkha into ādhyātmika, ādhibhautika and ādhidaivika, referred to in Sāṃkhyakarikā 1 and made explicit in the commentaries on it, is met with in connection with defining diseases to be duḥkhasaṃyoga. According to Tīsaṭā-cārya diseases are classified into three groups, viz. karmaja, doṣaja and ubhayaja, and Caraka (Śārīrasth. 1.86ff.) distinguishes between past, present, and future vedanās.

We also find threefold divisions of the causes of diseases. Thus e.g. Caraka, Sūtrasth. 1.54 reads thus:

kālabuddhīndriyārthānām yogo mithyā na cāti ca dvyāśrayāṇām vyādhīnām trividho hetusamgrahaḥ,

¹⁰⁰ Cf. also the prescription for the use of soma referred to above on p.141.

¹⁰¹ On which see fn.61 above.

¹⁰² Cf. also Śivatattvaratnākara 2.3.

¹⁰³ The Laws of Manu, (SBE XXV), reprint Delhi-Varanasi-Patna 1967.

p.206, and last but not least M. G. Weiss, 'Caraka Samhitā on the Doctrine of Karma' in Karma and Rebirth in Classical Indian Tradition, ed. by W.D. O'Flaherty, Berkeley—Los Angeles—London 1980, pp.90-105. Much interesting information is also contained in works such as Viśveśvara Bhatta's Madanamahārṇava (ed. by E. Krishnamacharya and M.R. Nambiyar, (GOS 117), Baroda 1953), which discusses the causes of and cures for diseases mainly in terms of what may be called karman and adharma, and prāyaścitta respectively. The great Bengali author Bankim Candra Caṭṭopādhyāy's Dharmmatattba (first published in book form in 1888) also contains a very interesting discussion on diseases being caused by adharma (in his own special neo-Hindu definition). This important work has unfortunately not yet been translated into any European language.

¹⁰⁵ Cf. Suśruta, Sūtrasth. 1.22.

¹⁰⁶ Cikitsākalikā, verse 10f.

'wrong use, non-use and excessive use¹⁰⁷ of time (i.e. seasons etc.), intelligence and sense objects is the threefold complex of causes of diseases which have two loci (viz. body and mind)¹⁰⁸. Or in the Aṣṭāṅgasaṃgraha (Sūtrasth. 22.6) the doṣas, which are the only cause of all diseases (sarvarogaikakāraṇam: 22.5), are said to have in their turn a threefold nimitta, viz. asātmyendriyārthasaṃyoga, prajñāparādha and pariṇāma. On the other hand it has to be noted that Caraka (Sūtrasth. 1.23) teaches a quadruple division of āgantu, śārīra, mānasa and svābhāvika diseases.¹⁰⁹ It is hence as clear as one can wish that the threefold classification of the two verses quoted in the YD is merely one among many different attempts at systematically dividing the causes of diseases, and no clear parallel to it has so far been presented from a medical text. Hāritasaṃhitā 3.2.23 as quoted by Pandeya in a footnote on p.12 of his edition of the YD, viz.

karmajā vyādhayaḥ kecid doṣajā santi cāpare sahajā kathitās cānye vyādhayas trividhā matāḥ,

does not, of course, meet this requirement, but it has also not been possible to identify the source from which the author of the YD quotes here. It cannot even be regarded as certain that it is a medical work, for when making the corresponding assumption¹¹⁰ I did not yet take into consideration the pronounced tendency of proper Āyurveda texts¹¹¹ to declare all diseases without exception, whatever their causes may be, to be curable. In fact it cannot at all be precluded that the source drawn upon in the YD belongs to quite a different branch of learning,¹¹² although the argument (that the quotation is meant to make) is, no doubt, strongest if it is the science of medicine itself which is called to witness.

Yet a definite answer to this question can only be given when a comprehensive investigation of *all* systematic divisions of the causes of diseases, found in medical texts, has been undertaken. In view of the richness of the relevant material such a study would, however, clearly go beyond the scope not only of the present essay, but also of anything which could still be subsumed under the term 'article'. Nevertheless it is hoped that the above discussion has at least demonstrated: (a) that it is sometimes worthwhile to examine a quotation more closely even if it cannot be identified, (b) that semantic studies are very much needed in the field of Ayurvedic research, and above all (c) that 'cataloguing' of ideas, i.e. collecting, analysing and describing them with a view to

Note how the author expresses himself, i.e. that na and ati correspond to the compounds ayoga/yogābhāva and atiyoga.

¹⁰⁸ Cf. the immediately following verse: \$\sigma\bar{a}\sigma\text{ram} sattvasami\sigma\text{nam} ca vy\sigma\dhin\sigma\text{nam} \sigma\strayo mata\dagger \dots \text{...}.

¹⁰⁹ At Aṣṭāṅgas., Sūtrasth. 22.1 a sevenfold division is taught.

¹¹⁰ See above p.132.

¹¹¹ Cf. e.g. Aṣṭāṅgasaṃgraha 22.3.

¹¹² And this could likewise apply to the verse quoted in the YD after the two verses under discussion and mentioned already above (fn.20).

A preliminary attempt to gather material relevant for such an investigation has been made by R.P. Das, op. cit. (in fn.88), pp.268 and 519.

studying their interrelation and historical development, is a desideratum of Indology the lack of which is very much felt. In dreaming of a 'History of Ideas in India' one should not, of course, disregard the vast and fascinating realms of non-philosophical thought.

Scènes d'alchimie dans la littérature jaina

NALINI BALBIR

À M. A. Roşu en hommage.

Au même titre que les autres branches du savoir, l'alchimie, au sens conventionnel du terme, a suscité l'intérêt des Jaina. Il y aurait beaucoup à apprendre de l'abondante littérature technique, en grande partie encore inédite, composée dans leurs cercles depuis le 13ème siècle, beaucoup à y glaner pour une meilleure connaissance de la médecine iatro-chimique, qui, à l'emploi des végétaux, substitue celui des minéraux à des fins curatives.¹

Je souhaite, pour ma part, attirer l'attention sur un certain nombre de données que recèle la littérature *narrative*. L'examen devrait permettre de déterminer s'il existe une alchimie jaina spécifique, quels en sont les procédés et le vocabulaire, les présupposés et les buts.

(I)

1. Il sera d'abord fondé sur un texte antérieur à la plupart des śāstra d'origine brahmanique ou jaina, puisqu'il est inséré dans la *Km.*, roman en prakrit de type campū (alternance de vers et de prose) qui contient plus d'un développement technique.² Les informations qu'il fournit ont historiquement une valeur exceptionnelle; car on sait avec certitude qu'il est, d'un bout à l'autre, l'œuvre d'un unique auteur — Uddyotanasūri —

Abréviations: CDIAL = R.L. TURNER, A Comparative Dictionary of the Indo-Aryan Languages, London 1966; Joshi = Damodar Joshi, Rasaśāstra, Trivandrum 1986; Km. = Kuvalayamālā (voir n.3); Mishra = Siddhinandan Mishra, Āyurvedīyarasaśāstra (en hindi), Varanasi—Delhi 1981 (Chaukhambha Orientalia); Roy = M. Roy — B.V. Supparayappa, Rasāmavakalpa. New Delhi 1976; t. tech. = terme technique de métallurgie ou d'alchimie; ZDMG = Zeitschrift der Deutschen Morgenländischen Gesellschaft. — Pour les textes, les références sont à la page et à la ligne. Un nombre suivi d'un astérisque indique un passage en vers.

¹ Les données jaina n'étaient pas connues de l'History of Chemistry in Ancient and Medieval India incorporating the History of Hindu Chemistry by Acharya Prafulla Chandra Rây, edited by P. RAY, Calcutta 1956. Quelques jalons sont posés dans J. C. SIKDAR, 'Jaina Alchemy', Indian Journal of History of Science 15,1, 1980, p.6-17, à qui l'on doit également l'édition et la traduction du Rasaratnasamuccaya de Māṇikyadevasūri (16ème s.), Jaipur 1986.

² Exposé de type astrologique (19.13ss.); détails sur le *khanya-vāda* ou science des trésors (104.22ss.); leçon de physiognomonie avec référence à un *Samudda-sattha* (129-131); exposés relatifs aux présages (183.24-184.20 et 268-269); divertissements littéraires (174.21ss.) etc. La substantielle introduction du second volume (voir n.3) permet de repérer facilement ces passages. Etant donné la maigreur de la bibliographie consacrée à ce roman, pourtant si vivant et si intéressant, c'est l'occasion de signaler l'étude que Mme A. METTE consacre à la physiognomonie, telle que la *Km*. la décrit, en rapport avec les 'passions' (à paraître dans le volume commémoratif dédié à F.R. Hamm, éd. H. Eimer, Bonn).

et on connaît avec précision sa date de rédaction: 779.³ Cette date correspond à peu près à l'époque à laquelle on fait généralement remonter le développement du rasa-sāstra en Inde.⁴ Il n'est donc sans doute pas inutile de relire dans une perspective technique les pages afférentes del la KM., malgré l'essai de traduction partielle qu'en a naguère donné A.K. Warder (*Indian Kāvya Literature*, Part IV, Delhi 1983, pp.563-565).

Le décor alchimique est planté dès l'abord: c'est la *nuit* au sommet des sauvages Monts Vindhya, dont la richesse minérale est par ailleurs souvent mentionnée. Paisiblement endormi aux côtés de Kuvalayamālā, le prince Kuvalayacandra est bientôt réveillé par un feu qui brille, apparemment sans raison, dans l'intérieur d'une *grotte* de la montagne (*ekkammi Vinjha-girivara-kandarālantarammi jalaṇaṃ jalamāṇaṃ*, 195.5). Il aperçoit des silhouettes inquiétantes qui s'affairent autour — 'hommes ou démons?'. Il les dépeint ensuite 'pauvres hères en proie à l'emprise de la soif, qui, pareils à des démons, hantent les grottes des montagnes couvertes de forêts' (195.22) et dont l'activité mystérieuse ne doit pas être troublée. Elle pique la curiosité du prince qui, intrigué, décide, non sans s'être armé, d'aller observer incognito 'ce que ces êtres complotent'.

Devant le héros, comme devant le lecteur, se déroulent alors en une succession systématique les opérations qui visent à la transmutation d'un métal vil en or et montrent à l'œuvre le métallurgiste puis l'alchimiste procédant à l'aurifaction.

2. La première phase, après l'extraction proprement dite du minerai (dont le texte ne parle pas), consiste à déterminer la nature du métal que contient le minerai d'après les caractéristiques de la flamme (jālāe lakkhaṇaṃ). Ces enseignements, mis dans la bouche des personnages qu'observe Kuvalayacandra, pourraient provenir du livre auquel la suite montre qu'ils ont recours (cf. putthae lihiyaṃ, 196.25).

tambammi hoi rattā pītā kaṇayammi sukkilā rayae lohe kasiṇā kaṃsammi ṇippabhā hoi⁶ jālāo. jai āvaṭṭaṃ davvaṃ tā esā hoi ahiya rehillā; aha kaha vi aṇāvaṭṭo sa cciya mauyā ya vicchāyā. (195.14*-15*)

'Dans le cas du cuivre, la flamme est rouge; jaune dans le cas de l'or, blanche dans le cas de l'argent. Dans le cas du fer, elle est noire et dans le cas du bronze de cloche, terne. Si la substance est en fusion, (pk. āvaṭṭa = sk. āvarṭa, āvarṭana, t. tech.) la flamme sera puissante et brillante; si, pour une raison ou une autre, il n'y a pas fusion, elle restera faible et sans éclat.'

³ Uddyotanasūri's Kuvalayamālā (A Unique Campū in Prākrit) and Ratnaprabhasūri's Kuvalayamālā-kathā (A Stylistic Digest of the Above in Sanskrit), Critically edited with various readings by A.N. UPADHYE, Part I Kuvalayamālā, (Singhi Jain Series 45), Bombay 1959. Part II Ratnaprabhasūri's Kuvalayamālākathā, (Singhi Jain Series 46), Bombay 1970: cette réfection sanskrite du milieu du 13ème s. n'apporte rien pour les passages examinés ici. Elle contient la trame du récit, non les à-côtés techniques: p.195-198 (texte prakrit) = *69.8-26 (texte sanskrit; le seul terme d'allure technique attesté par cette version est kalka 'électuaire').

⁴ A. ROŞU, 'Mantra et Yantra dans la médecine et l'alchimie indiennes', Mantras et diagrammes rituels dans l'hindouisme, Paris 1986, p.124.

⁵ Voir par ex. ROY, intr. p.2.

⁶ Ici et plus bas on constate la tendance du verbe à l'invariabilité: hoi jālāo; dīsai ... °rasā.

Il est probable que ce type d'observation, que les métallurgistes modernes ne récuseraient pas, a dû être fondamental dans la pratique. Rares sont pourtant les textes qui le mentionnent explicitement: seul le Rasārṇava (circa 12ème s.) permet une confrontation d'où se dégagent les enseignements suivants. Bien que la liste des minéraux y soit plus fournie, le bronze (sk. kāṇsya) n'y figure pas. La concordance de couleur est parfaite pour l'or, l'argent, et même le fer, la différence de terminologie entre Rasārṇava (tīkṣṇa) et Km. (loha) étant ici sans portée. En revanche, la couleur rouge attribuée à la flamme du cuivre est déconcertante: le Rasārṇava, conforme à l'observation scientifique, la dit bleue (nīlanibhā) et ne mentionne le rouge pour aucun minerai dans ce contexte. Le texte de la Km. ne portant pas de variante, il faut supposer une erreur de copiste ou d'observation, ou, encore, une assimilation due à l'analogie avec la couleur du minerai brut de qualité supérieure.

La liste des métaux telle qu'elle figure ici n'est pas exhaustive. On n'y trouve ni l'étain, mentionné dans la suite du développement, ni le plomb et le laiton, qu'une autre liste (§ 7C) intègre pourtant.

3. L'attention des traiteurs de minerai est attirée sur l'observation de l'action thermique (lakkheha aggi-yamman: sk. agnikarman) qui, étant 'aussi difficile à percevoir qu'il est difficile de viser la prunelle d'une figurine-cible' (rāhā-veha-samāṇaṇ eyaṇ dullakkhayaṇ hoi), requiert toute leur compétence. C'est que la température approximative de fusion permet de déterminer la nature du métal:

jai mauyam tā vangam, khara-jalame hoi phuṭṭaṇam kaṇayam; mauyam vanga-vihīṇam ajja vi bahue ṇa jāṇanti. (195.18*)

'S'il (fond à feu) doux (sk. *mṛduka*), c'est de l'étain; à haute température, c'est de l'or craquelé. (Si le feu est) doux sans que ce soit de l'étain, aujourd'hui encore,

beaucoup⁸ ne savent pas (ce que c'est).'

L'expression phuțțanam kaṇayam pourrait désigner une variété imparfaite d'or. Dans le Rasendracūḍamaṇi (XIV.11), l'adjectif sphuțant figure parmi les dix caractéristiques de l'or qui n'est pas apprécié (na śasta). La deuxième partie de la strophe semble indiquer une incertitude concernant la fusion des métaux compris entre les deux extrêmes déterminés par le premier hémistiche.

4. La strophe suivante marque la fin des opérations purement métallurgiques et la bifurcation vers celles qui devraient aboutir à la transmutation. Elle définit les conditions favorables à l'incorporation de nouvelles substances dans le métal fondu (pk. $v\bar{a}va$ = sk. $v\bar{a}pa$, t. tech.):

jaha dīsai aggi-samā mūsā-anto kaḍhanta-dhāurasā jaha ya siṇiddhā jālā taha kālo hoi vāvassa. (195.20*)

'Si l'on voit dans le creuset (sk. $m\bar{u}_s\bar{a}$) que, incandescents, les minerais en fusion sont en train de bouillonner (pk. kadhanta: sk. \sqrt{kvath}) et que l'éclat en est limpide, c'est le moment de l'incorporation.'

⁷ Rasāmava IV.49ss. cité RAY, p.324 ou MISHRA, p.498.

⁸ Bahue est curieux. Si la forme est authentique, je ne puis y voir autre chose que le nomin. plur. de tendance pronominale de bahua (sk. bahu-ka).

La description du processus revient maintenant à la prose (195.25ss.):

'Bien, c'est le moment de l'incorporation (esa avasaro padivāvassa: sk. prativāpa, t. tech. équivalent de (ā)vāpa⁹). Qu'il y soit procédé. Procédons au bain du métal (dans l'eau'; nisiccau dhāū-nisego: sk. niṣeka, t. tech. 10). Tout en devisant, tous jetèrent dans le creuset la combinaison de poudres (cuṇṇa-jogo). Ils écartèrent ensuite le creuset (du feu). Une fois faite l'immersion (pakkhitte nisege (?)), ils attendirent un peu: il s'était produit du cuivre (tambayaṃ jāyaṃ) ... '

5. La scène de désespoir extrême auquel donne lieu ce résultat navrant montre, s'il en était besoin, que le but de l'expérience était bien l'aurifaction. Le héros, lui-même connaisseur en dhātuvāda (cf. Km. 22.5*), intervient alors. Provoquant d'abord l'effroi des alchimistes ainsi découverts, il se fait bientôt connaître comme un de leurs pairs (aham pi narindo¹¹ kutūhalena sampatto, 196.2) et a recours au 'mot de passe' des initiés: siddhi, siddhi, auquel répond susiddhi, susiddhi: terme banal sans doute, mais ici chargé de connotations et renvoyant à la réussite alchimique aussi bien qu'au Succès final (la Délivrance) des Jaina. Après s'être fait longuement prier, le prince interroge les alchimistes sur les substances précises qu'ils ont utilisées pour l'incorporation et le bain. Le vocabulaire employé est le même que précédemment, moyennant l'addition de l'expression imassa kaham pindī baddhā, 'Comment avez-vous procédé pour constituer la bille de métal?' (sk. pindī, t. tech.). La réponse, malheureusement allusive, ne donne aucun renseignement sur la nature des substances (imam imam ca davvam ti, 196.27). Elle satisfait toutefois Kuvalayacandra qui ne trouve rien à redire, comprend d'autant moins l'échec et suppose qu'il est dû à l'intervention néfaste d'un être surnaturel qui a subtilisé la poudre au moment où elle était jetée dans le métal, l'empêchant ainsi d'entrer en contact avec lui: c'est ce que recouvre l'expression condensée atthi avahariam tam imāņam (196.28), et telle est bien en effet la cause alléguée pour expliquer l'échec d'une expérience de transmutation du cuivre en or que relate le Kathāsaritsāgara (XXXV.82ss.), ou celle qui aurait pu le provoquer dans un épisode du Kumārapālapratibodha tout à fait comparable à notre passage, bien qu'extrêmement succinct¹².

6. Dans ces conditions il ne reste plus à Kuvalayacandra qu'à renouveler l'opération. Cette portion du texte permet d'apercevoir clairement ce qui distingue radicalement l'opération technique sus-décrite et l'alchimie véritable. La phase clef semble concerner l'incorporation. Kuvalayacandra y procédera, tandis que la chauffe et la fonte du métal seront le lot de ses compagnons (dhamaha tubbhe, aham padivāyam demi, 196.29). Alors que cette incorporation avait précédemment eu lieu au milieu d'un bavardage

⁹ *MISHRA*, p.94

¹⁰ MISHRA, p.95: les autres termes employés dans le rasasastra sont nirvapa ou snapana.

¹¹ Ce terme sera examiné en détail § 7A.

¹² Kumārapālapratibodha of Somaprabhâchârya, éd. Muni Jinavijaya, (GOS 14), Baroda 1920, 367.1ss.: pecchae dhāuṃ dhammante dhāuvāige. 'paḍau vasu-hāra' tti jampiyaṃ aṇeṇa. tehiṃ bhaṇiyaṃ 'sāgayaṃ'ti. uvaviṭṭho tāṇa samīve kumāro. chūḍho tehiṃ jogo so kumāra-ppabhāveṇa Vantarehiṃ na avahario tti jāyā kaṇaga-siddhī.

insouciant (§ 4), elle est ici, non seulement faite au moment propice en fonction de la particularité de la flamme (jāṇiūṇa jālā-visesaṃ), mais aussi accompagnée d'un rituel:

'Le prince s'en remit à la Vertu (avalambiāṇa sattaṃ), salua les Jina, associés de toutes les victoires, s'inclina devant les Siddha, prit la poudre à incorporer qu'il consacra avec la formule suivante: "Hommage aux Siddha, hommage à ceux qui ont réussi grâce au Joṇāpāhuḍa". Et, tout en récitant cette formule (imaṃ ca vijjaṃ paḍhanteṇa), il jeta (la poudre) dans l'ouverture du creuset. Le creuset enflammé fut écarté (du feu). Il fut baigné dans un bain. On attendit un instant: c'était devenu de l'or aussi pur qu'un globe de lumière.' (196.31-197.1)

À ses compagnons ébahis ('le même terrain, la même poudre, le même bain. Nous avions du cuivre; tu as de l'or!') Kuvalayacandra n'a évidemment aucun mal à fournir une explication: 'Vous n'êtes pas fermes dans votre foi (saddhābhisankiņo), vous n'avez ni mantra, ni Vertu. Tandis que moi, j'ai pris appui sur la Vertu, je me suis prosterné devant le dieu de prédilection (iṭṭha-devo), j'ai récité la formule. Voilà pourquoi j'ai réussi (siddhaṃ) et vous non.' Sur leur demande, il précise que ce dieu c'est le Seigneur Omniscient (bhagavaṃ savvaṇṇū) qui a exposé l'intégralité du Joṇīpāhuḍa, et que le mantra, c'est le quintuple hommage (pancanamaskāra). Puis le prince leur en livre le secret.

Ces considérations seront réitérées lorsque, répondant aux questions de Kuvalayamālā, le jeune homme expliquera pourquoi ils avaient échoué:

'Il y a d'insensés maîtres alchimistes (niratthayā narindā, 197.21) qui, dépourvus de Vertu, impurs, ne pratiquant pas la chasteté, en proie à la cupidité, pleins de convoitise, occupés à trahir leurs amis, ingrats, n'ayant pas de dieu pour refuge, ne connaissant pas les formules, n'ayant pas de compagnon, ignorants, sans énergie, dénigrant leur maître et n'ayant pas la foi, se laissent aller: "les maîtres alchimistes de cet acabit qui ne connaissent pas les Ecritures et n'ont pas de Vertu, cherchent l'aumône au loin comme des malheureux vêtus d'écorce, les mauvais maîtres alchimistes!". (197.24*)

Ceux qui, en revanche, ont du discernement, sont énergiques, pratiquent la chasteté, ont vaincu leurs sens, sont sans cupidité, sans arrogance, sans convoitise, dignes, enclins à la charité, pleins de sympathie pour leurs amis, dévoués à leur maître, honorent les dieux, sont familiers avec la récitation des mantra, ne peuvent que réussir. Et comme on dit: "Ceux qui se consacrent à la grandeur du maître et du dieu, qui ont toutes les Vertus, voilà quels maîtres alchimistes peuvent changer en or même les montagnes".' (197.27*)

La leçon est assez claire: l'alchimiste n'est pas un praticien ordinaire. Comme c'est généralement le cas pour tout initié à une discipline particulière en Inde (cf. par ex., dans le cas de l'alchimie, *Rasendracūḍamaṇi* III.27-28), il doit être porteur de qualités morales, avoir une conduite irréprochable, être le disciple respectueux d'un maître, humain ou non: l'hommage, concrétisé par la toute puissante formule du *pancanamaskāra* est ici aux Jina, aux Siddha (avec probablement un double sens; § 5) et au traité spécialisé plus ou moins mythique du *Yonīprābhṛta* dont nous ne connaissons le

contenu que par des références ou des citations, mais qui pour les Jaina serait l'ouvrage de référence dans le domaine alchimico-magique.¹³

Sans avoir exactement déterminé la cause de leur échec, les mauvais alchimistes en

avaient eu le pressentiment:

'Cette combinaison (de substances) a fait ses preuves, le terrain est tout à fait favorable, le maître (uvajjhāo) est un expert, les hommes de l'art ont du savoirfaire (niunā narindā), les plantes sont pleines de sève, la conjonction est auspicieuse (sohaṇaṃ laggaṃ), des offrandes ont été faites (diṇṇāo balīo)¹⁴. Et pourtant tout a échoué. C'est donc que nous n'avons pas de mérite antérieur (natthi puvva-puṇno amhāṇaṃ, 195.31; et 196.22 a-uṇṇa-phalaṃ)'.

Des signes physiques spécifiques, souvent critères d'ordre astrologique, sont également nécessaires (cf. Rasendracūḍamaṇi, ibidem). Dès l'abord, Kuvalayacandra était apparu comme les possédant (atthi lakkhaṇāiṃ siddha-purisassa, 196.9). La strophe

censée les développer est malheureusement d'allure extrêmement générale:

'Qui possède toutes les marques, est profond, a de la Vertu et du rayonnement, qui consomme et qui donne à sa guise, voilà l'homme qui attire le succès.' 15

7. La portion finale du texte n'est pas moins instructive. Elle montre Kuvalayacandra retrouvant Kuvalayamālā, au comble de l'inquiétude (197.12ss.), et donne d'abord lieu à un échange entre les deux jeunes gens sur la valeur de l'enseignement alchimique. Devant la curiosité de Kuvalayamālā, Kuvalayacandra s'étonne que malgré son niveau d'éducation (qui couvre tous les arts) elle n'ait pas appris celui-là: 'C'est qu'il n'apporte peut-être rien. C'est seulement une théorie', répond-elle (kira ettha ṇatthi phalaṃ, vādo ceya kevalaṃ, 197.18). Le prince est outré: 'Il se peut que le Meru tremble, que la rivière divine coule à contre-courant: rien de ce qui a été exposé dans le Joṇīpāhuḍa n'est mensonger!' (197.20*)

Kuvalayacandra occupe donc la dernière partie de la nuit à impartir à Kuvalayamālā la base de ce savoir. Qu'une femme soit le récipiendaire de cet enseignement est finalement peu surprenant: Kuvalayamālā, qui mérite la désignation de yakṣiṇī (196.19), n'est pas un être banal. Le modèle femme-disciple/homme-maître ne manquera pas de faire songer à certains textes d'inspiration tantrique où Siva est l'instructeur de Pārvatī. Pour se limiter au domaine alchimique, tel est, par exemple, le cas dans le Rasārṇava-kalpa du Rudrayamalatantra.

Pour l'heure, la leçon de Kuvalayacandra occupe neuf āryā (qui pourraient bien être issues du Joṇīpāhuḍa).

Autre référence dans la Km.: 34.24*: nāṇa-jī'uppattī-suvaṇṇa-maṇi-rayaṇa-dhāu-saṇijoyaṃ jāṇanti jaṇiya-joṇī joṇīṇaṃ pāhuḍaṃ aṇṇe. Voir également J.C. Jain, Prakrit Narrative Literature, Origin and Growth, Delhi 1981, p.148.

¹⁴ La nature des offrandes n'est pas précisée ici. Mais voir § 9.

jo savva-lakkhaṇa-dharo gambhīro satta-teya-sampaṇṇo bhunjai dei jah'icchaṃ so siddhī-bhāyaṇaṃ puriso (196.11*).

A. Les trois premières distinguent trois catégories d'alchimistes dont elles donnent les désignations et les spécialités respectives, en s'appuyant sur une explication de type étymologique (kuṇai/kiriyā; dhāu/dhamai). Cette classification n'est pas, à ma connaissance, attestée par d'autres textes.

kiriyā-vāi ņarindā dhāuvvāī ya tiņņi eyāim; loe puņa supasiddham dhāuvvāī ime savve:

jo kuṇai joya-juttim kiriyā-vāī tu so bhave puriso.

jo una bandhai niuno rasam pi so bhannai narindo.

jo genhiūna dhāum khettāo dhamai khāra-juttīe

so kira bhannai payadam dhāuvvāī jane sayale. (197.29*-31*)

'Praticiens, maîtres alchimistes, métallurgistes, telles sont les trois (catégories), mais on leur donne communément à toutes le nom de *dhātuvādin*. Celui qui procède à la combinaison des ingrédients est le praticien, tandis que le maître alchimiste est celui qui s'entend à fixer le mercure. Celui qui extrait le minerai du sol et le fait chauffer et fondre à l'aide d'un mélange alcalin, voilà celui que tout le monde appelle, au sens propre, métallurgiste.'

Tandis que le terme de kriyāvādin est limité à cette définition, les deux autres ont été employés au cours du récit même. Bien connu par les rasaśāstra en général, dhātuvādin (métallurgiste / alchimiste) a été utilisé, conformément à ce qui en est dit ici, comme terme générique (sāhio sayalo dhāuvvāiya-vuttanto, 197.15), et comme terme spécifique, appliqué au groupe d'hommes lorsqu'il procédait aux opérations métallurgiques proprement dites (195.22). Dans un passage précédent (191.24*-25*), qui décrivait la première phase de l'activité de (mauvais) métallurgistes, on les voyait, selon une technique bien connue depuis la plus haute Antiquité, faire chauffer et fondre le métal mais n'obtenir rien d'autre que de la cendre (te cciya dhamanti suiraṃ tattha vi chāro paraṃ hatthe, 191.25*). 16

Le vocable *narendra*, apparemment non attesté dans les rasaśāstra mais connu en sanskrit pour désigner un 'physician, master of charms or antidotes' (Monier Williams, s.v.), est plus souvent attesté dans le récit de la *Km.* que *dhātuvādin* (195.30,32; 196.2,4;197.16,22,24*). Même si l'opération spécifique dont le *n.* a la charge ('la fixation du mercure') n'a pas été mentionnée comme facilitant la transmutation dans les deux expériences décrites plus haut, il semble que le sens de l'expression technique *rasaṃ bandhai* (cf. sk. *rasa-bandhana*) ne fasse pas de doute. Globalement, *narendra* désigne probablement le spécialiste de la partie magique de l'expérience. Le terme a naturellement un double sens dans la bouche de Kuvalayacandra, prince et maître alchimiste (*ahaṃ pi ṇarindo*, 196.2¹⁷).

B. Le détail des opérations alchimiques ($kiriy\bar{a}$), auquel sont consacrées les trois strophes suivantes, est loin d'être clair. Je ne suis pas actuellement en mesure d'en donner une traduction et me contenterai donc d'en extraire quelques éléments techniques.

¹⁶ W. RAU, Metalle und Metallgeräte im vedischen Indien, Wiesbaden 1974, p.26ss.; J. SAKAMOTO-GOTO, 'Das Verbaladjektiv von dhmā im Mittelindischen', Münchener Studien zur Sprachwissenschaft 44 (= Festgabe für Karl Hoffmann, Teil I), 1985, 171-189.

¹⁷ Cp. Śiśupālavadha 2.88, cité Apte, Sanskrit Dictionary, s.v. nara.

kiriyā bahū viyappā ni-bbīyā hoi pāya-bīyā ya. addha-kiriyā ya payaḍā pāo taha hoi ukkariso. sā hema-tāra-bhiṇṇā duvihā aha hoi sā vi du-viyappā kaṭṭha-kiriyā ya paḍhamā¹⁸ duiyā sa-rasā bhave kiriyā. taha vāva-ṇisegehiṃ davveṇ'ekkeṇa davva-joehiṃ taha dhāu-mūla-kiriyā kīrai jīvehi < m > aṇṇā vi. (197.32*-198.1*)

La dernière strophe condense (en une syntaxe un peu rude) les opérations déjà vues: avec l'incorporation de substances (une ou combinées) dans le métal en fusion et le bain de ce métal, a lieu l'opération consistant à mélanger racines et minéraux.

Les deux autres distinguent d'abord entre opérations où l'on n'a pas recours au germe de métal noble (ni-bbīyā: sk. nir-bīja) pour transmuer le métal vil, et celle où on y a recours dans la cuisson (pāya-bīyā: sk. pāka-bīja). D'après les traités techniques, le bīja est incorporé à la préparation de mercure pour augmenter sa puissance d'amalgamation. La situation est ici plus floue: le texte ne permet pas de savoir si la présence du mercure est requise à ce stade. Viennent ensuite les caractéristiques de la cuisson et le distinguo à faire selon que ce germe est de l'or ou de l'argent, à moins que le composé hema-tāra-bhiṇṇā ne renvoie à la séparation de l'or et de l'argent ('le départ') dont on connaît deux modalités, l'une à sec et l'autre humide (sa-rasā?). Le texte peu clair, semble d'ailleurs mal assuré (voir la variante n.18).

Comme c'était le cas pour l'opération d'incorporation, les vers reprennent en partie la terminologie d'un passage en prose précédent (non moins obscur). En effet ayant appris que Kuvalayacandra était un maître alchimiste, les dhātuvādin l'avaient interrogé sur les modalités de l'expérience qu'il disait avoir déjà pratiquée à Ayodhyā: tehim bhaṇiyaṃ 'sundaraṃ eyaṃ, kiṃ atthi kinci siddhaṃ ṇibbīyaṃ²¹ ahavā hoi rasa-baddho addha-kiriyāvasiddho pāo ahavā viukkariso'? (196.5-6)

La réponse de Kuvalayacandra, intelligible en soi mais quelque peu sybilline, avait été:

jai hoi kinci davvam honti sahāya vva niunayā kei osahi-joyau akkhara²² tā siddham natthi sandeho (196.7*)

¹⁸ Variante: hoti sā viyappā addhakiriyā paḍhamā (Km. 197).

Définitions du terme technique bīja en alchimie dans ROY, p.148; JOSHI, p.298: 'Purified gold and silver are known as Bīja, these may be added to mercure for increasing its appetite or amalgamation power'; Rasendracūḍamaṇi IV.93. Le Rasaratnasamuccaya qui répertorie vingt-six types de fixation (bandha) du mercure distingue entre nirbīja bandha et sabīja bandha: JOSHI, p.102. Une autre possibilité serait d'opposer nirbīja 'impotent (gold), i.e. gold not of pure quality, unable to give rise to the production of gold from base metals' (ROY, p.144) et pakvabīja (> pk. pāya-bīya ?), 'Ripened bīja, i.e. bīja combined with (essence of) other metals and minerals by heating' (ROY p.145).

²⁰ Sur cette technique, voir par exemple J. NEEDHAM, 'Artisans et alchimistes en Chine et dans le monde hellénistique', La tradition scientifique chinoise, Paris 1974, p.139-140.

²¹ Lire ainsi. Ed. nivvīyam.

²² Pour akkharam avec voyelle nasale brève.

'S'il y a quelque substance et quelques experts comme auxiliaires, on réalise l'Impérissable (= l'or?²³) grâce à la combinaison des végétaux: il n'y a pas de doute.'

On ne peut manquer de noter le caractère techniquement vague du libellé (kinci davvam) et de relever l'absence de mention du mercure. L'accent semble porter sur l'alchimie végétale, d'ailleurs connue en Inde.²⁴ Tout se passe comme si le prince opposait aux subtilités techniques de ses interlocuteurs une alchimie de base pour leur faire entendre, peut-être, que ces considérations sont de peu d'importance en comparaison de la compétence et de la qualité morale des hommes.

C. Enfin, Kuvalayacandra donne (en une āryā et demi) un échantillon de la 'langue des maîtres alchimistes' (198.4*). Il s'agit en fait d'une énumération des matériaux nécessaires à la poursuite de leurs opérations:

nāgam gandham suvvam ghosam taha tāra-hema-tikkhāī sīsa-tau-tamba-kamsam ruppa-suvannāi <m > loham ca āram tahā pasiddham; sūyaya-kuṇadī ya tālayam ceya nāini-bhamarāīyam esā bhāsā narindānam. (198.3*-4*)

Les deux premières listes de sept termes, qui donnent les noms des métaux (dhātu ou loha dans le rasaśāstra), se réduisent à une. On y observe en effet qu'ils sont répétés sous forme de synonymes: 1) plomb $(n\bar{a}ga/s\bar{\imath}sa)$, 3) cuivre (suvva: sk. śulva²⁵/tamba: sk. tāmra), 4) bronze de cloche (ghosa: sk. ghoṣa/kaṃsa); 5) argent (tāra/ruppa), 6) or (hema/suvanna) et 7) fer (tikkha: sk. tīkṣṇa 'acier'/loha). Une discordance, facilement amendable, apparaît pour 2) l'étain, normalement désigné par tau (sk. trapu) dans la seconde liste, mais sans correspondant dans le texte actuel de la première qui donne gandha (= sk. gandha(ka)) 'soufre', tout à fait hétérogène. Il est hors de doute qu'il faut ici retenir la variante vangam du manuscrit sur papier de Poona qui rétablit la symétrie. Le soufre, qui relève de la catégorie des uparasa, a pu être inséré ici, par erreur, parce qu'il est un constituant essentiel des opérations alchimiques. Sa place logique aurait dû être aux côtés des autres uparasa mentionnés à la strophe suivante. Mais il est clair qu'il y a ici un flottement: en témoigne la mention, rejetée en tête de l'arya suivante, et manifestement additionnelle, de l'élément ara, 'laiton'. On aboutit ainsi à la liste maximale de huit métaux, apparemment plus tardive que celle de six, connue par exemple par l'Uttarādhyayanasūtra (36.73: fer, cuivre, étain, plomb, or, argent).26

²³ Ou 'immortalité?' Ou les deux sens? Pk. akkhara: sk. akṣara n'est apparemment pas répertorié parmi les désignations de l'or, mais la relation entre or (but de l'alchimie) et l'immortalité est bien connue par ailleurs: cf. M. ELIADE, Forgerons et alchimistes, Paris 1956, p.55; etc.

²⁴ Cf. M. ELIADE, Le yoga, Immortalité et liberté, Paris 1954, p.278-279.

²⁵ Malgré Pischel, Grammatik der Prākṛit Sprachen, § 296: 'lva = lla'. Noter en outre la forme suluvvaṃ (196.24; v.l. suvvaṃ) avec disjonction du groupe consonantique.

²⁶ Les listes de l'Angavijjā (éd. Muni Punyavijaya, Bénarès 1957, p.221, 233 et 258) mentionnent or, argent, étain, plomb et plusieurs variétés de fer.

La classe suivante, beaucoup moins systématique, inclut le mercure (sūyaya: sk. sūtaka), ici mentionné sans ambiguïté, et deux des uparasa, à savoir le realgar (kuṇaḍī: sk. kunaṭī) et l'orpiment (tālaya: sk. tāla etc.).

Les deux derniers termes sont d'interprétation plus délicate. Toutefois nāinī pourrait correspondre au sk. nāginī (ou nāgadantī), désignation d'une plante qui contribue à la transmutation des métaux et à leur purification: d'après le Rasārṇavakalpa (v.463cd), le mercure frotté avec le jus de cette plante est instantanément amalgamé à une variété de fer connue, précisément, sous le nom de bhramara (= Km. bhamara?) et a la capacité de transmuer les métaux.²⁷

(II)

Sans être aussi développées que celle de la *Km*., d'autres scènes d'alchimie parcourent la littérature narrative jaina, et, chacune à leur manière, renseignent sur un aspect de cette technique ou de sa conception.

8. L'une des plus anciennes et des plus précises, malgré sa brièveté, figure dans la Vasudevahiṇḍī, roman jaina qui doit être antérieur au 6ème siècle. Alsdorf, qui a édité et traduit ce passage, a montré qu'il pourrait être la source de l'épisode de Hasan et de l'orfèvre dans les Mille et une nuits.²⁸

À partir d'un morceau de métal (fer?) noir frotté avec du rasa (kāla-lohaṃ makkhiyaṃ raseṇa), jeté dans les braises (chūdhaṃ angāresu), chauffé et fondu à l'aide d'un soufflet (dhantaṃ bhatthaeṇa, t. tech.²⁹), un ascète de type sivaïte (tidanḍī ... parivvāyaga) fabrique de l'or de bonne qualité (jāyaṃ pahāṇaṃ suvaṇṇaṃ) en présence du héros, Cārudatta, ébloui. La suite du récit montre sans doute possible que le rasa doit être du mercure. En effet, si le terme isolé est vague, une précision permet d'emporter la décision: à Cārudatta, égaré et démuni, que l'expérience réussie a alléché, l'alchimiste propose d'aller chercher un supplément de rasa: rasaṃ āṇemu saya-sahassa-vehiṃ. Le qualificatif, mal compris par Alsdorf qui le croyait corrompu,³⁰ est un terme technique, bien connu de toute la tradition alchimique et toujours appliqué au mercure dont il donne la capacité de transmutation (Joshi, p.98; Roy, p.157; etc.). Un mercure satasahasravedhin (ou lakṣa°) est celui qui a la capacité de transmuer cent mille fois son propre poids de métal vil en or. Les puissances variant, on rencontre aussi le

²⁷ nāginyā bhramarāyasam sūto grhņāti tat-kṣaṇāt. Ou faut-il voir en bhamara l'équivalent du bhramarāyantra, appareil mentionné par la Rasakāmadhenu?

²⁸ L. ALSDORF, 'Zwei neue Belege zur "indischen Herkunft" von 1001 Nacht', *ZDMG* 14, 1935, 280ss. = *Kleine Schriften*, Wiesbaden 1974, p.523ss. = *Vasudevahinḍī*, éd. Muni Caturvijaya-Punyavijaya, Bhavnagar 1930, réimpr. Ahmedabad 1989, p.146.

²⁹ Sk. bhastrā: TURNER, CDIAL 9424; véd. bhastra: RAU, Metalle und Metallgeräte, p.26.

³⁰ Kl. Schr., p.524 'saya-sahassavehim (?)' et p.527, n.2: 'sayasahassavehim ist unklar, wahrscheinlich verderbt. Der Sinn muss sein: genug rasa, um Gold im Wert von Hunderttausenden herzustellen.'

mercure *śatavedhin* ou le mercure *koțivedhin*. Tous ces termes sont également connus de la littérature jaina.³¹

9. Dans la seconde partie du récit les deux hommes partent à la recherche du mercure, logé dans une anfractuosité située au fond d'un puits (rasa-kuṇḍa). Cārudatta le recueille dans une coloquinte (tumba), l'alchimiste remonte la précieuse substance à l'aide d'un dispositif mécanique et disparaît. Cette séquence fournit le prototype d'un scénario récurrent.³²

Il est répété par exemple dans le *Līlāvatīsāra*, roman du 13ème s., où l'alchimiste — sans avoir fait la preuve de son pouvoir — invoque son 'livre de recettes' pour se vanter de procurer de l'or à un jeune homme naïf et pauvre, et apparaît comme une figure perfide et dangereuse:

... yogy asmi gacchāmi rasa-kūpikām paśyaiṣa mama kakṣāyām vidyate kalpa-pustakam kūpikāyāḥ parāptena rasena śata-vedhinā sahasra-bhāraśaḥ śulvam kariṣyāmy asmi kāñcanam. (VI.163-164)³³

Tout en relatant une aventure identique,³⁴ le chap. XIV (v.314ss.) contient un détail remarquable. Abandonné dans le puits, le héros y retrouve un deuxième homme car, dit le texte :

na vinā pum-balim hi syād rasa-siddhih kathañcana. (XIV.327)

Le 'sacrifice humain', nécessaire à la réussite de l'opération alchimique, pourrait bien être plus qu'un motif littéraire. Faut-il en rapprocher la coutume consistant à offrir 'des sacrifices humains aux fourneaux' qu'auraient pratiqués certaines tribus indiennes?³⁵

10. C'est à l'époque médiévale, celle où le rasasastra a atteint son apogée, que les textes jaina mentionnent le plus systématiquement l'utilisation du mercure comme substance essentielle à l'alchimie.

Ainsi, l'apprentissage du dhātuvāda par Vasunanda, fils de marchand que la passion de l'alchimie conduit à sa perte, inclut la connaissance des sols et de leur odeur spéci-

³¹ Infra; et encore Hemacandra, Trişaşţiśalākāpuruşacarita (12ème s.) I.1.844: koţi-vedha-raseneva tāmra-rāśiḥ suvarny-abhūt; Jinaprabhasūri, Vividhatīrhakalpa (éd. Muni Jinavijaya, Bombay 1934): 8.15*,21*; 9.3*: sahassa-vehī raso; 9.5*: raso saya-vehī; 9.8*: panca-veha; et passim le verbe vindhei au sens technique de 'transmuer'; 104.21 koḍi-rasa-veha-vuttanta; B.J. SANDESARA — J.P. THAKER, Lexicographical Studies in 'Jaina Sanskrit', Baroda 1962, s.v. koṭivedhin rasa: 'a chemical preparation of mercury that possesses such magical powers as to enable one to perform the most difficult tasks' (p.123).

³² Aux passages ici examinés, on ajoutera l'histoire de Somaprabha, version apabhramésa de l'Ākhyānakamanikośa éd. Muni Punyavijaya, (Prakrit Text Series 5), Bénarès 1962, 138.8*-9*: 'Tous deux grimpèrent au sommet de la montagne. Ils rassemblèrent différentes variétés de minéraux et de racines (samjutti dhāu-mūliyaham payari), les mélangèrent et les firent fondre jusqu'à ce qu'ils eussent l'éclat de l'or (avaropparu mīsivi dhamiu jāva dippantu suvannaum huyaum tāva).

³³ Jinaratna's Līlāvatī-sāra, A Sanskrit abridgement of Jineśvara Sūri's Prakrit Līlāvaī-kahā, éd. H.C. BHAYANI, (L.D. Series 96), Ahmedabad 1983.

³⁴ L'alchimiste s'y nomme dhātuvādin et requiert pour l'aurifaction un lakşavedhirasa.

³⁵ M. ELIADE, Forgerons et alchimistes, p.68ss.

fique ($vigandhim_{r}d$), ³⁶ celle du mica (abhraka), dont on sait qu'il a sa place dans certaines opérations mercurielles, celle des racines ($m\bar{u}l\bar{l}$), mais aussi de la fixation du mercure ($p\bar{a}rada-bandha$, t. tech.; $L\bar{l}l\bar{a}vat\bar{l}s\bar{a}ra$ VI.244).

11. Ces opérations sont désignées par une terminologie technique qui se fait plus

précise.

Le demi-śloka suivant note la transmutation du métal vil (fer) en métal noble (or) par contact du mercure (*sparśa-vedha*, t. tech.), ce qui est l'une des modalités de transmutation répertoriées par les traités (ex. *ROY*, p.157):

ayo 'pi hemī-bhavati sparśa-vedhi-rasān na kim? (Trişaṣṭiśalākāpuruṣacarita VII.7.334)

Au contraire, une anecdote appartenant à la saga du roi Bhoja, fait allusion à la transmutation de cuivre en or par recours à la vapeur de mercure, autre méthode bien connue (cf. Roy, p.157; Joshi, p.300):

pradīpikā-dhūma-vedhena rājñas tāmra-maṇḍikā suvarṇī-kṛtā. (Purātanapraban-dhasaṃgraha 22.17)³⁷

12. Le tableau le plus complet est celui que l'on trouve dans quelques versions jaina de la biographie de *Nāgārjuna l'alchimiste*, toutes composées entre le 13ème et le 14ème siècles.³⁸

Dans les libellés les plus simples, mention est faite des termes techniques désignant quelques-unes des étapes (connues des spécialistes sous le nom de saṃskāra)³⁹ qui contribuent à rendre le mercure puissant. Le but, problématique, est d'aboutir à sa fixation: svedana-mardana-jāraṇa-māraṇāni cakre, paraṃ sthairyaṃ na badhnāti. (Purā-tanaprabandhasaṃgraha 91.19 = Prabandhakośa 85.7-8) '(Nāgārjuna) réussit l'ébullition, le broyage, l'assimilation et la mort (du mercure: rasa), mais il ne parvient pas à le fixer.'

13. L'interprétation du passage correspondant dans le *Prabhāvakacarita* (date: 1268) soulève plusieurs difficultés, d'ordre grammatical notamment,⁴⁰ mais quatre śloka donnent un aperçu général de l'activité multiforme de l'alchimiste:

³⁶ Plutôt que 'odourless earth with magical properties?', comme le propose l'éditeur p.421. Aucune des deux interprétations n'est à écarter a priori, étant donné l'ambivalence de vi. Je n'ai pas rencontré le terme ailleurs.

³⁷ L'intégralité de ce passage, difficile, mériterait une attention particulière. Tous les prabandha sont édités par Muni Jinavijaya. Bombay: Singhi Jain Series.

³⁸ Je ne considère ici que les versions pertinentes pour le propos alchimique. On trouvera une étude d'ensemble de ces biographies dans Ph. GRANOFF, 'Jain Biographies of Nagarjuna: Notes on the composing of a Biography in Medieval India', *Monks and Magicians, Religious biographies in Asia*, Oakville 1988, p.45-66.

³⁹ Voir, par exemple, *JOSHI*, p.83ss.; *MISHRA*, p.211ss.

⁴⁰ Il est pourtant excessif d'écrire, comme le fait Ph. Granoff, op.cit., n.11, que ces vers sont 'definitely corrupt'.

girayaḥ sarito yasya gṛhāngaṇam ivābhavan dūra-deśāntaraṃ gehāntaraṃ bhūrikalādarāt, nāga-vangī-kṛtābhyāsas⁴¹ tāra-rangasya⁴² ranga-bhūḥ saṃgrahī cauṣadhīnāṃ yo rasa-siddhi-kṛtām iha, yaḥ sattvaṃ tālake piṣṭaṃ gandhake drāvam abhrake jāraṇaṃ māraṇaṃ sūte vettā chettā suduḥsthiteḥ, sahasra-lakṣa-koṭy-aṃśa-dhūma-vedhān rasāyanam piṇḍa-baddhān cakārātha nadīṣṇo rasa-sādhane. (37.1*-4*)

'Montagnes et rivières lui sont aussi familières que la cour de sa propre maison. Il (va) vers une autre lointaine contrée, vers une autre maison: le respect pour la moindre particule d'or le pousse⁴³. Ayant la pratique de la transformation du plomb et de l'étain, procédant à la coloration du métal brillant, il rassemble les végétaux qui contribuent à la réussite du mercure.⁴⁴ Il connaît (les différentes étapes de l'expérience): l'essence est broyée dans l'orpiment, la liquéfaction (se fait) dans le soufre, dans le mica l'assimilation, et la mort dans le mercure. Il vient à bout de ce qui est le plus difficile (?). Il a recours à la voie du mercure, qui transmue par fumée mille, cent mille, ou dix millions de fois (son propre poids de métal vil), fixé qu'il a été en sphérules (ou: grâce à une mixture, variante viḍa°):⁴⁵ tel est l'homme habile aux opérations mercurielles.'

On retrouve, dans la succession des étapes du troisième śloka, l'écho, en plus détaillé, des quatre opérations évoquées par les versions en prose de la biographie de Nāgārjuna (§ 12), sattvam piṣṭam correspondant à mardana et drāvam probablement à svedana. Les minéraux nécessaires à leur réalisation figurent comme tels dans les traités spécialisés, avec toutefois des divergences selon les textes (ex. ROY, v.379, 125; JOSHI, p.99; MISHRA, p.239).

14. L'importance de la technique dans l'alchimie est incontestable. Néanmoins, la Km. l'a montré, on considère qu'elle ne suffit pas à garantir la réussite (§ 6). Les biographies jaina de Nāgārjuna elles aussi soulignent l'obligatoire perfection religieuse et morale. Qu'on en juge.

⁴¹ Noms de métaux glosés en vieux gujarati dans l'un des manuscrits: sīsū 'plomb'; tarūunı 'étain' (malgré TURNER, CDIAL 5992 s.v. trapu: 'OG. tarūaünı 'lead").

⁴² La glose par suvama est logique. Je ne connais pas d'autre occurrence de tāraranga, ici naturellement favorisé par la recherche de l'allitération. Tāra désigne ordinairement 'l'argent', qui peut, au même titre que l'or, constituer le but d'une expérience alchimique.

⁴³ Le sens d'or pour bhūri est attesté dans les lexiques: R. GARBE, Die indischen Mineralien, Leipzig 1882, § 9. Variante sūri°.

⁴⁴ Je ne vois pas d'autre solution que de donner à la forme cvi une 'valeur avoisinant celle du génitif (prédicat) le plus libre' (RENOU, Grammaire sanscrite, p.151), bien qu'elle soit fort inhabituelle en pareil contexte (voir ex. § 11 et n.32). L'expression tārarangasya rangabhūḥ n'est pas claire: est-ce une allusion à l'opération technique de la 'coloration' (ranjana; cf. Rasendracūḍamaṇi IV.103; etc.)?

⁴⁵ La syntaxe est pour le moins curieuse. Sur vida, t. tech., voir JOSHI, p.299.

- A) Dans les versions du *Prabandhakośa* (85.8ss.;13.30ss.), du *Purātanaprabandhasamgraha* (91.20ss.), du *Prabandhacintāmaņi* (120.1ss.) et du *Vividhatīrthakalpa* (104.12ss.), Nāgārjuna,ne parvenant pas à fixer le mercure, consulte son maître Pādalipta qui lui indique la méthode à suivre: faire broyer le *rasa* par une épouse parfaitement vertueuse (*mahāsatī*), pourvue de toutes les marques auspicieuses (*lakṣaṇa*), et ce devant une image de Pārśvanātha (Jina qui passe pour donner la richesse). Opérant ainsi chaque nuit, Nāgārjuna atteint son objectif au bout de six mois. Le lieu de l'expérience, tīrtha jaina célèbre dans la géographie religieuse médiévale, est connu sous le nom de Stambhana-pura ('ville de la fixation').
- B) Le Prabhāvakacarita, toujours original (§ 13), ainsi qu'un passage, moins net, du Purātanaprabandhasaṃgraha (93.24ss.), opposent l'alchimie ordinaire, qui requiert toutes sortes d'ingrédients, et celle des Maîtres yogin, dont même les excréments sont doués de pouvoirs. He un incident éclaire Nāgārjuna: alors qu'il a brisé avec mépris contre une pierre un pot de verre contenant l'urine de Pādalipta, le liquide, doué d'un pouvoir de transmutation (nrjala-vedhena 37.17*), entre en contact avec le feu et la pierre devient or. La crise conduit l'élève à prendre conscience de la vanité de son activité passée. Amaigri il partait alors au loin à la recherche du 'citraka rouge (= Plumbago Zeylanica L.), de la muṇḍā noire (= Sphaeranthus Indicus L.), du sel de Sambar (Śākam-bharyāś ca lavaṇaṃ, 37.20*47) ou de la plante vajrakanda', toutes substances, qui, appartenant à l'arsenal des alchimistes, aident, selon les traités, à 'tuer' et fixer le mercure (ex. ROY, v.156, 185ss.; etc.). Renonçant désormais à tous ces accessoires (rasopakaraṇaṃ muktvā, 37.24*), il décide de se mettre entièrement au service de son maître.
- 15. Un point n'est qu'exceptionnellement abordé dans les textes passés en revue: le but réel de l'alchimie. En outre, on ne voit jamais se manifester la préoccupation de longévité ou d'immortalité, qui, unie à l'aurifaction, définit, d'après Needham, la véritable alchimie. Pour beaucoup des personnages rencontrés dans cette étude, à commencer par ceux de la *Km.*, les opérations entreprises ont un objectif purement pratique: acquérir soudainement et miraculeusement une richesse qui faisait défaut. On se rappellera un épisode des plus célèbres et souvent illustré: celui où le maître *Kālaka*, offensé, produit de l'or 'simplement en lançant une pincée de poudre dans le feu'⁴⁹ et permet ainsi le financement d'une guerre contre l'infâme Gardhabilla. Inversement on comprend du même coup que la passion de Vasunanda, un fils de marchand (§ 10), déchaîne le courroux de son entourage, et que le dhātuvāda soit

⁴⁶ Exemples dans M. ELIADE, Le Yoga, p.279.

⁴⁷ 'Romaka, also called Sakambari, is the salt produced from the Sambar lake near Ajmere': RAY, p.204.

⁴⁸ J. NEEDHAM, op. cit., p.127-131.

⁴⁹ sūriņā joga-cuṇṇa-cahuṇṭiyā-metta-pakkheveṇa suvaṇṇī-kāūṇa: H. JACOBI, 'Das Kâlakâcârya-Kathânakam', ZDMG 34, 1880, 264.15-16. Le terme cahuṇṭiyā, obscur pour Jacobi (p.283, n.3) est à rapprocher du guj. cuṇṭī 'pincée'. Les vingt-neuf autres versions de la légende (commodément rassemblées dans S. Nawab, Śrī Kālaka Kathāsaṇgraha, Ahmedabad 1949) n'enseignent rien sur le procédé alchimique lui-même.

dénommé vyasana 'vice' (au même titre que le jeu, la boisson etc.):⁵⁰ c'est, en somme, un moyen malhonnête de s'enrichir, en transgressant le dharma du groupe social.

L'alchimie n'a pas non plus ici, au contraire du tantrisme ou du yoga, de véritable fonction sotériologique. Bien employée, elle peut, toutefois, servir la doctrine. Car si elle permet l'enrichissement, elle en permet aussi la conséquence logique et nécessaire aux yeux des Jaina, à savoir le don. On s'explique ainsi ce que Nāgārjuna entend dire à son maître: 'Sans réussite de l'opération mercurielle, le désir de pratiquer le don ne saurait être comblé.'51

* * *

Cette étude ne prétend aucunement à l'exhaustivité. Elle aura du moins montré qu'entre les 6ème et 14ème siècles la question de la transmutation des métaux et de son processus a beaucoup préoccupé les Jaina. Les textes de la Kuvalayamālā (8ème s.) et de la Vasudevahindī (avant le 6ème s.) auront permis de souligner la place du prakrit dans l'élaboration d'une terminologie spécialisée. On aura vu à l'oeuvre deux grandes catégories d'alchimistes: les vagabonds, éventuellement charlatans, et les maîtres jaina parmi lesquels des figures célèbres (Kālaka, Devacandra le maître de Hemacandra⁵², Pādalipta et Nāgārjuna) ou encore les princes particulièrement doués et vertueux. Au vu des techniques qu'utilise l'alchimie de la littérature narrative, on ne peut, semble-t-il, conclure à l'existence d'une alchimie jaina propre. La spécificité se manifeste plutôt dans les objectifs ou la nature des ingrédients idéologiques (pancanamaskāra-mantra; rôle de Pārśvanātha etc.). Il conviendra, ultérieurement, de s'interroger sur les rapports entre alchimie et géographie religieuse en milieu jaina étant donné les pouvoirs dont on voit investis, par exemple, les sols et les minéraux de la colline sacrée de Girnar⁵³: il pourrait bien s'agir d'une 'mode' de l'époque médiévale puisqu'on retrouve un phénomène comparable à Śrīśailam, au Deccan.

Summary: The present paper considers alchemy in Jaina narrative literature in Prakrit and Sanskrit.

I. Alchemy is dealt with at some length in the Prakrit novel Kuvalayamālā (of which the exact date of composition, 779, is firmly established). The relevant pages (195-198) are analyzed (§§ 1-7). It is shown how various precise technical observations concerning metallurgy are taught (in prose and in āryā verses), how they tally with what one finds in various (later) rasaśātras, but how there remains some doubt about the extent to which mercury is used. On the other hand it is clear that according to the views expressed by the hero of this episode metal transmutation is possible only for those who possess the necessary moral and

⁵⁰ Līlāvatīsāra VI.372.

⁵¹ Rasa-siddhim vinā dānecchā na pūryate, Purātanaprabandhasamgraha 91.18 ≠ Prabandhakośa 85.6.

⁵² Prabandhacintāmaņi 93.20ss.: ELIADE, Le Yoga, p.275-76.

⁵³ Vividhatīrthakalpa de Jinaprabhasūri (14ème s.) p.8-9: Ujjayantakalpa.

spiritual qualifications: where ordinary technique is seen to fail, right faith, mantra (the pancanamaskāra) and book (Joṇīpāhuḍa) ensure success (§ 6).

II. The second part of the paper is a perusal of allusions included in an episode of the Vasudevahiṇḍī (not later than the 6th cent.) (§ 8) and several stories embedded in the Līlāvatīsāra (13th cent.) or the prabandha-literature (13th-14th cent.). The most famous ones concern Nāgārjuna the alchemist. Though the various narratives differ widely, they show recurring motives and specialized teachings (lists of minerals, technical devices ...). It is remarkable that alchemy as such is nowhere presented as a soteriological means. On the other hand the possession of gold can be looked upon as the first step towards one of the basic virtues recommended in Jainism: generosity (dāna).

Index des termes techniques

(Renvois aux paragraphes ou aux notes)

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Überlegungen zu Rasaratnasamuccaya (Kapitel 1-11) und zu Rasendracūḍāmaņi

ADELHEID BENDIXEN

Somadeva, Autor des Werkes *Rasendracūḍāmaṇi* (RCū)¹, wird von Rāy², Jaggi³ und Mazars⁴ übereinstimmend in das 12. bis 13. Jahrhundert datiert.

Das Werk Rasaratnasamuccaya (RRS)⁵ könne nicht vor Beginn des 14. Jahrhunderts entstanden sein, weil darin häufig Somadeva zitiert werde, bemerkt Mazars.⁶

Die Feststellung Siddhinandan Mishras im Vorwort der Textausgabe des RCū,⁷ Vāgbhaṭa, den er als Verfasser des RRS ansieht, habe in den Kapiteln 1-11 des RRS die meisten seiner Ślokas dem RCū entnommen, beschreibt den Sachverhalt (abgesehen von den problematischen Angaben zum Verfasser⁸) sehr zutreffend.

Jaggi⁹ und Biswas¹⁰ bezeichnen den RRS als Kompilation des 13. Jahrhunderts und nennen als Verfasser Vāgbhaṭa. In RRS 1,8 bezeichnet sich der Verfasser selbst allerdings lediglich als Sohn des Simhagupta. Nach einem Vergleich der beiden Texte scheint mir der RRS, zumindest was die Kapitel 2-10 anbelangt, keine Kompilation zu sein, sondern die Wiedergabe des Textes des RCū (sozusagen eine 'Neuausgabe'), wenn auch mit einigen Veränderungen, Auslassungen und Einschüben.

Die Veränderungen sind formaler und inhaltlicher Art.

Formal erfolgt eine Umstellung der Kapitel und eine Änderung der Reihenfolge der Verse innerhalb mancher Kapitel.

¹ Zur benutzten Edition s. Anm. 7.

² P.C. Rāy, History of Hindu Chemistry, Vol.II, Calcutta 1909, S.liv.

³ O.P. Jaggi, Yogic and Tantric Medicine, Vol. V, Delhi/Lucknow 1979, S.142.

⁴ G. Mazars, 'Une littérature à explorer: Les rasaśāstra', S.327-335 bei G.J. Meulenbeld (Hrsg.), Proceedings of the International Workshop on Priorities in the Study of Indian Medicine, (Publikaties van het Instituut voor Indische talen, en culturen 4), Groningen 1984, S.331.

⁵ Hrsg. mit dem Hindi-Kommentar Suratnojjvalā von Kavirāj Śrī Ambikādatta Śāstrī, Varanasi 1961.

⁶ Loc. cit.

⁷ Rasendracūḍāmaṇi by Somadeva, (Chaukhambha Orientalia, Jaikrishnadas Ayurveda Series 57), Varanasi 1984, S.8.

⁸ S. hierzu G.J. Meulenbeld, *The Mādhavanidāna and its Chief Commentary, Chapters 1-10*, (Orientalis Rheno-Traiectina 19), Leiden 1974, S.423.

⁹ Loc. cit.

¹⁰ A.K. Biswas, 'Rasaratnasamuccaya and Mineral Processing State-of-Art in the 13th Century A.D. India', *Indian Journal of History of Science* 22, 1987, S.29-46; s. S.29.

Als eine der wenigen inhaltlichen Änderungen ist z.B. zu erwähnen, daß Somadeva $r\bar{a}j\bar{a}varta$ als $mah\bar{a}rasa$ (RCū 10,1; 10,55-60) bezeichnet, der Autor des RRS $r\bar{a}j\bar{a}varta$ dagegen nur als ratna (4,2; 4,75-81) aufzählt und behandelt, dafür aber capala als $(mah\bar{a})rasa$ nennt (2,1) und zur Beschreibung dieser Substanz (2,135-141) auf das $Ras\bar{a}r\bar{n}avatantra$ (RV)¹¹ und eine von mir nicht identifizierte Textstelle zurückgreift (RRS 2,135-136 \approx RV 7,23-24).

Die Einschübe stammen häufig aus dem RV, seltener aus dem Rasahrdayatantra des Govindabhagavatpāda (RH)¹² — eine Ausnahme macht das 1. Kapitel (RRS 1,33-59), das eine längere Passage des RH (1,3-33) darstellt — und einem oder wahrscheinlich mehreren Texten, die von mir nicht identifiziert sind.

Einen Hinweis, daß der Autor des RRS diesen Teil seines Werkes als Textwiedergabe und nicht als Kompilation versteht, sehe ich darin, daß er Somadeva nicht unter den Autoritäten aufzählt, deren Tantras er studiert hat (RRS 1,1-7). Daß er seine Bezugnahme auf Somadeva verheimlichen will, ist unwahrscheinlich, da auch Verse aus dem RCū übernommen sind, in denen der Name Somadeva vorkommt, wie z.B. RRS 3,42 (RCū 11,31), RRS 8,1 (RCū 4,1), RRS 8,100 (RCū 4,116), RRS 9,1 (RCū 5,1), RRS 5,231 (RCū 14,198).

Der Verfasser des RRS muß Somadeva als eine anerkannte Autorität angesehen haben, die es nicht nötig hatte, die eigene Autorität durch Zitate aus anderen Werken zu untermauern, da er keine der Verse und Kapitel, in denen Somadeva unter namentlicher Nennung der Quelle aus anderen Tantras zitiert, in den RRS übernimmt. Es fehlen:

RCū 1,35; 14,128-129; 15,29-31; 15,35 (Bezug auf Nandi),

RCū 14,199-205 (Bezug auf Devasūnu),

RCū 15,32 (Bezug auf Bhāskara),

RCū 15,33 (Bezug auf Dineśvara/Bhāluki),

RCū 15,34 (Bezug auf Govinda),

RCū 15,54-57 (Bezug auf Bhāluki).

Ferner fehlen das 6. Kapitel (Bezug auf Manthānabhairava: 6,1) und das 7. Kapitel (Bezug auf Śrīkantha: 7,1).

Der Verfasser des RRS begnügt sich mit einem Hinweis auf diese Autoritäten am Anfang seines Werkes (RRS 1,1-17). Es fehlen allerdings in dieser Aufzählung die Namen Śrīkantha, Dineśvara und Devasūnu.

¹¹ Hrsg. von P.C. Ray und H. Kaviratna, Nachdruck Calcutta 1985.

¹² Hrsg. mit dem Kommentar des Caturbhujamiśra, (Kṛṣṇa-Gopāla Granthamālā 23), Ajmer 1958.

State Policy Towards Indigenous Drugs in British Bengal*

POONAM BALA

British Policy towards indigenous drugs in Bengal formed an integral component of the wider framework of policies followed by the State in colonial India. In this paper, I shall examine the changes in the drug policy in Bengal as a sequel to the gradual development of the drug industry and scientific advancements in Britain at the time. Various phases characterise this policy.

Phase I

The initial phase of friendly co-existence of the Indian and western systems of medicine commenced with medical training at the Native Medical Institution (hereafter: N.M.I.) and ended in the triumph of the Anglicists in introducing the English language and European sciences in India. Nevertheless, interest in indigenous medicine continued in later years, maintained, as we shall see, by the investigation of *indigenous drugs* with a view to extending medical relief to the indigenous population.

At the beginning of the nineteenth century, the British authorities and practitioners of western medicine saw indigenous medicine as an area of opportunity suitable for research. Thus in 1813 the Court of Directors stated that 'there are also many tracts of merit, we are told, on the virtues of plants and drugs, and on the application of them in medicine, the knowledge of which might prove desirable to the European practitioners, and by such intercourse the nation might gradually be led to adopt the modern improvements in these and other sciences'. This was the first official statement of interest in assessing the significance of indigenous medicine. This view was based upon writings such as those of Sir William Jones, who wrote a memoir entitled *Botanical Observations on Select Indian Plants* between 1790-1800, and of Whitelaw Ainslie, whose *Materia Medica of Hindoostan* appeared in 1813.

The interest in indigenous medicine also found expression in the establishment of the N.M.I., followed by the Calcutta Sanskrit College and the Calcutta Madrasa, where parallel instruction was carried out in indigenous and translated western texts. This was done with a view to instructing young Indian Hindus and Muslims in order to fill the position of native doctors in the Civil and Military Establishments of the Presidency of Bengal. The plan was, however, adopted by the Government on the 9th of May 1822 and the scheme was published as a General Government Order of the 21st of June 1822. Students trained at the N.M.I. were, according to the orders of the then Governor-General, to be appointed in the Army. The staff at the institution consisted of a Civil

^{*} Paper presented at the III International Conference on the Study of Traditional Asian Medicine, 4-7 January 1990, at Bombay, India.

¹ B.D. Basu, History of Education under the Rule of the East India Company, Calcutta 1867, p.20.

Assistant Surgeon assisted by two Indian assistants; Dr. John Tytler², a versatile Orientalist, was appointed Superintendent of the School.

Medical instruction at the schools was imparted through the medium of Indian vernaculars. However, dissection was carried out not on human, but on animal bodies because of the religious aversion of Indian students to corpses. Short treatises on anatomy, medicine and surgery were prepared and translated by the Superintendent for the purpose of instruction in order to familiarise students with the nomenclature employed in medical science in Europe. This may have been the initial exposure to western medicine in Bengal at that time. Students attached to European hospitals were placed under the apothecaries in these hospitals 'to attend the hospital wards and dispensaries and to assist in dressing the patients in preparing and administering medicines', while those attached to the Native Hospital in Bengal were to be placed under the medical officers 'to assist in the duties of the Establishment'.³

In 1826 medical education was extended by the institution of medical classes at the Calcutta Sanskrit College and the Calcutta Madrasa, the former imparting instruction in Āyurveda and the latter in Yūnānī medicine. Both centres of learning were aided by the Government.⁴ It was in the same year that the Government raised the sanctioned number of students at the N.M.I. from twenty to fifty and appointed four assistants — two Hindus and two Muslims — to assist in teaching and hospital work. The education of each native doctor cost the Government about 1,000 Rupees.

It was not until 1827 that Tytler started a series of lectures on mathematics and anatomy at the Sanskrit College and the Madrasa in accordance with teaching in Europe. It is known that some of the students of this college (number not available), who had acquired a good knowledge of anatomy and physiology, were appointed to responsible positions under Civil Surgeons or in hospitals. In 1832, more teachers were appointed to lecture to students of Āyurveda in Sanskrit and to teach the works of Caraka, Suśruta and Vāgbhaṭa. At the Madrasa, students were familiarized with the works of Yūnānī and Arab physicians. We know only a few of the works which were utilized for instruction, namely (with the form of the name most commonly used): Šarḥ Asbāb, Aq Ṣarāʾī (actually the author of the work, which is: Ḥall al-Mūğaz), Sadīdī (the popular name of the work aš-Šarḥ al-Muġnī) and Anīsu 'l-Mušarriḥīn.

The halcyon days of the N.M.I. and the medical classes at the Sanskrit and the Madrasa Colleges virtually came to an end in the year 1835 when the new policy of the Bengal Government put an end to the earlier attempts to run oriental and western medical systems simultaneously. The factors responsible for this discontinuity are briefly summed up below.

The first review of the progress of the N.M.I. was carried out by the Court of Directors in the year 1828. It indicated the satisfactory state of medical education at the institution, but later reports for 1832 and 1833 indicated some defects in the system of medical training at the N.M.I. In 1833 the N.M.I. was thus caught up in the reformation

² A European doctor trained in western medicine.

³ Centenary Volume Sub-Committee, 1935: Centenary Volume of the Medical College, Bengal: 1835:1934, Calcutta, p.1.

⁴ W.C.B. Eatwell, 'On the Rise and Progress of Rational Medical Education in Bengal', Calcutta Medical College, *Medical Tracts: 1839-1879*, Calcutta 1880, 1-18; 16.

policy of William Bentinck, who appointed a *Public Instructions Committee* to report on the progress of medical education since the establishment of the N.M.I., and to suggest measures that it would be expedient to adopt with a view to better instruction, also including the arts and sciences of Europe. The Committee recommended changes in tuition, the period of training and the examination system, and also with regard to courses on practical anatomy which were non-existent. The poor attendance on the practical means of instruction and the absence of a proper qualifying standard were added to the list of the defects of the N.M.I. The Committee was, however, divided in opinion on the medium of instruction, which led to the Anglicist-Orientalist dispute, resolved in favour of the Anglicists who laid down that 'a knowledge of the English language we consider as a *sine qua non*, because that language combines itself the circle of all the sciences and incalculable wealth of printed works and illustrations, circumstances which give it obvious advantages over Oriental languages, in which are only to be found the crudest elements of science, or the most irrational substitutes for it'.⁵

In 1835, following the triumph of the Anglicists over the Orientalists, the N.M.I. was abolished and order passed 'that students of the N.M.I. as are now capable of passing their final examination shall be appointed native doctors, and all other students of that institution be transferred to the native corps of the army, upon their present salaries, to become native doctors when represented to be duly qualified by a committee of medical officers, or, if not found qualified in two years, to be discharged'.

The abolition of the N.M.I. did not mean the end of medical education in Indian vernaculars. Vernacular medical education (excluding instruction in indigenous medical science) was recommenced in 1839, with instruction in Urdu, and later in Bengali. Only one member of the staff of the N.M.I., Pundit Madhusudan Gupta, an Ayurvedic practitioner trained in western medicine, is recorded as transferring to the new Calcutta Medical College.⁶

Following this, State interest was maintained in indigenous drugs, for these were cheaper and more easily accessible than western drugs. This resulted in Sir William Brooke O'Shaughnessy's *Bengal Pharmacopoeia*⁷, of 1837, which is the first book of its kind dealing exclusively with the properties and uses of the medicinal plants used in Bengal. In that year also, the Governor General of India in Council, Bengal, established in Calcutta an efficient Medical Laboratory for the purpose of preparing medicines, and the first consideration in his opinion was an indigenous pharmacopoeia, pointing out as far as they were then known or could be learnt, the properties of Indian medicines and their effects.⁸ This, the Government observed, could afford cheap and effective medical relief to the vast population and could also be used in Military and General Hospitals and Dispensaries.

Medical men appointed in charge of testing the efficacy of indigenous pharmacopoeia formed an important component of State policy. For instance, an Apothecary General,

⁵ Centenary Volume, loc. cit.

⁶ Ibid.

⁷ Proceedings of the Government of India, Home Department, Medical Branch, Sept.-Oct. 1837, Proceeding no. 7.

⁸ Ibid.

who may have been of Indian origin and well acquainted with indigenous drugs, and a Superintendent of the Botanical Garden were included in the Dispensary Committee of Calcutta. Indian Compounders were appointed in almost all the Charitable Dispensaries in Bengal, for assisting in investigation. Dr. O'Shaughnessy, working with the Government, also proposed to consult the extant authorities on the indigenous materia medica for the purpose of selecting indigenous remedies and subjecting each to exact analysis and finally to prepare a sufficient quantity for administration and test in hospitals. Following these investigations, the indigenous drug Cannabis indica was added to the British pharmacopoeia by Dr. O'Shaughnessy in the year 1839. The drug was included for the preparation of an extract and a tincture. The pharmacopoeia was eventually printed at the expense of the Government.

While these additions were being made to the medical personnel engaged in investigating the drugs, a separate unit comprising surgeons attached to the principal hospital and the Medical Board was subsequently constituted in order to convey the relevant results to the Medical Board.

In 1841 western medical men introduced indigenous remedies in the dispensaries¹² in Bengal. *Kala Dana*¹³, for instance, was among the other drugs used extensively in addition to drugs composed of opium and calomel. The latter two, in particular, were extensively utilized during the 1839-40 cholera epidemic which ravaged the Presidency of Bengal, claiming a heavy toll of life. Success in utilizing these and other drugs may have contributed to continued State efforts in emphasizing indigenous drugs, as most of these in use at the Chittagong dispensary were 'principally prescribed and found to suit very well'¹⁴; this was clearly stated in the half-yearly returns of the Chittagong Dispensary.

Phase II

In the next phase — in the 1860s —, while the indigenous pharmacopoeia formed a crucial subject of investigation in India, the pharmacopoeia in Britain at the time underwent significant changes. Thus the listing of official drugs, which achieved official recognition following the Medical Act of 1858, came to be recognized by the General Medical Council (hereafter: G.M.C.) in 1858 as the *British Pharmacopoeia*. New editions and addenda followed in quick succession after the first publication in 1864, and western practitioners in India took upon themselves the task of investigating significant aspects of the indigenous pharmacopoeia.

⁹ Ibid.

¹⁰ G.E. Trease, *Pharmacy in History*, London 1964, p.197.

¹¹ Half-yearly Reports of the Government Charitable Dispensaries, Bengal Medical Department, Aug. 1840 – Jan. 1842, pp.1-312.

¹² Name not known.

¹³ Hindi: kālādānā, mircāī, botanical name: Ipomoea hederacea (Fam. Convolvulaceae).

¹⁴ Half-yearly Reports, Aug. 1840 — Jan. 1842, p.194.

An impetus to give State recognition to drugs in India came from the legal status ascribed to the British Pharmacopoeia by the General Medical Council in Britain (G.M.C.). The historical survey of the standardisation of crude drugs has shown that the different methods used to control the quality of these substances had developed simultaneously with the increase in knowledge of the characters, properties, and constituents of the plants and drugs involved. The succession of editions of the British Pharmacopoeia in Britain from 1864 to 1932 indicates that microscopical studies in concurrence with other advances assisted in characterising the drugs, in addition to providing newer methods for ensuring their purity. These pharmacopoeial essentials of western medicine. then, ensured the efficacy of drugs appearing on the market in Britain.¹⁵

The standardisation of western drugs led practitioners of western medicine in India to be increasingly critical of the lack of refinement of indigenous medicine. They wished to increase the use of refined western drugs, but the Government, conscious of costs, wished to emphasize the use of local products wherever possible. The tension between the Government and western medical practitioners surfaced in 1866 when the latter complained that their indents for European medicines were either tardily or insufficiently supplied by the Medical Store Department at Calcutta.

But the inordinate costs involved in procuring European medicines from England and introducing them in the bazaars of Calcutta made it almost impossible to continue the usage of European drugs in the Presidency. 16 Considering the low costs involved in procuring dry medicinal substances (native in origin) in many Indian bazaars as compared to those involved in receiving them from England in processed form, the Medical Department, therefore, declared that indigenous drugs be used more generally and 'the ones available in a crude and uncouth form'17, be given laboratory treatment before administration. The idea behind this was to provide indigenous drugs to all Government dispensaries in the Presidency. These supplies were, accordingly, 'to be debited by Commissariat Officers against contingent bills of Jails and Dispensaries, and paid for by the Civil governing authorities.'18 Thereafter, several Indian medical officers and civil medical officers 'published "ere long" a valuable pharmacopoeia of indigenous drugs'.19

Administrative medical officers were directed by the State to see that the indents of European medicines were diminished in accordance with the supply of good native drugs in their stead.²⁰ A.P. Howell²¹ instructed the Medical Department that the 'supply of European medicines be limited strictly to those medicines of which no native drugs could

¹⁵ See B. Jackson, 'From Papyri to Pharmacopoeia', in F.N.L. Poynter (ed), The Evolution of Pharmacy in Britain, London 1965, pp.151-164.

¹⁶ Proceedings of the Government of India, Medical Branch, July-Dec. 1866, p.1547.

¹⁷ Ibid., p.1549.

¹⁸ Ibid.

¹⁹ Ibid.

²⁰ Ibid.

²¹ He was the then Under-Secretary to the Government of India.

efficaciously be substituted. The Government would then pay for such European medicines only and the local funds would be charged with the cost of the native drugs that could be used in substitution.'22

The compromise between practitioners of western medicine and the State in British India was seen in terms of careful and systematic testing of indigenous drugs and refining them for better strength, and simultaneous utilization of European medicines. The Calcutta Medical College formed the pivotal institution for implementing these plans. Experiments were, accordingly, conducted at the Medical College Hospital, and also in the Presidency General Hospital, for the purpose of testing the value of various indigenous plants.²³ The eventual purpose of this scientific activity, Chopra²⁴ argues, was the inclusion of Indian drugs in the *British Pharmacopoeia*. Extensive use of indigenous drugs was also made feasible by their introduction in the Calcutta Medical College as well as in medical schools of the Presidency. Continued attempts in this direction led in 1868 to the publication of *The Pharmacopoeia of India* at the behest of the British administrators.

The investigation and refinement of Indian drugs was only slowly achieved, but with the pressures which made them so economically attractive, the use of such drugs could not be abandoned. As a consequence, there were periodic calls for new efforts at refinement and standardisation. And in October 1895, a committee headed by Surgeon G. King and J.F.P. McConnell, Professor of Materia Medica at Calcutta Medical College²⁵, proposed to extend the use of indigenous drugs bearing the following objects in mind:

- a. to find out ways of encouraging the systematic cultivation of indigenous medical plants;
- b. to increase the use of indigenous drugs of known therapeutic value at various medical depots in Bengal;
- c. to sanction the manufacture of stable preparations of drugs at these depots.

Phase III

By the late nineteenth century western medicine had moved away from indigenous medicine, owing primarily to the increasing professionalisation which led medical practitioners in Britain as well as in India to discard the humoral basis of diagnostics in medicine.²⁶ This attitude gained strength through the rise of the drug industry in Britain, influenced by Germany which had the leading pharmaceutical industries at the

²² Proceedings, July-Dec. 1866, p.1553.

²³ L.G. Mathews, *History of Pharmacy in Britain*, Edinburgh 1962, p.90.

²⁴ R.N. Chopra, R.N., Indigenous Drugs of India — their medical and economical aspects, Calcutta 1933, p.13.

²⁵ Indian Medical Congress Report, Calcutta 1894.

²⁶ The theory of body humours occupied a central place in indigenous medicine for the diagnosis and treatment of disease. Conditions of good health are a result of the equilibrious state and normal blending of the three humours, namely, wind, bile and phlegm, while ill-health results from an imbalance or disturbance in the proportion of the humours.

time. As a consequence western practitioners came to regard indigenous medicine as necessarily inferior.

Indian and western practitioners trained in western medicine thus began to distance themselves from the textual and cultural contexts in which the indigenous drugs were located.²⁷ Udoy Chand Dutt, for instance, in his *Materia Medica* of 1877, edited out the sections on humoral observations in indigenous medicine which, he said 'were not so much the result of observation and experience as the outcome of an erroneous system of pathology and therapeutics'.²⁸ Similarly, M.C. Koman, in his report on indigenous drugs to the Madras Government in 1921, condemned the humoral diagnostics and therapeutics which could not 'hold against the rational physiology of the day'.²⁹

The divergence of the indigenous and western systems of medicine probably became evident at this stage of British rule in India. The response of the practitioners of indigenous medicine to the above rejection of the humoral basis was twofold: (a) some challenged the theories of Indian medicine, thus falling in line with those discarding it, while (b) others proposed further research in indigenous medical science,³⁰ with a view to remedying these 'defects'.

Even though Indian and European practitioners of western medicine, as also of indigenous medicine, were discarding as well as challenging these theories, indigenous medicine continued to thrive under the aegis of the few indigenous physicians who, in 1878-79, established a dispensary at Calcutta to propagate the knowledge of Indian medicine through inexpensive books on the same. In order to make sure that traditional systems were not wiped out, the protagonists of Indian medicine funded pharmaceutical concerns to manufacture and sell indigenous drugs.³¹ This however also enabled the Āyurvedists of Bengal (Kavirājas) to earn considerable wealth, so that they were at one time, as Gupta claims, 'among the richest men in the country.'³²

The founders of the drug industry in Britain were, in fact, the descendants of the drug makers of the eighteenth and nineteenth centuries.³³ There were three main processes turning drug-making into a highly organised industry.³⁴ The *first* was marked by the

²⁷ D. Arnold, 'Medical Priorities and Practice in Nineteenth-Century British India', *South Asia Research* 5(2), 1985, 167-183.

²⁸ U.C. Dutt, The Materia Medica of the Hindus, Calcutta 1877, pp.iii-v.

²⁹ M.C. Koman, Report on the Investigation of Indigenous Drugs, Calcutta 1921, p.3.

³⁰ M.Z. Siddiqui, 'The Unani-Tibb (Greek Medicine) in India' in D.M. Bose (ed.), A Concise History of Science in India, New Delhi 1971, p.273.

³¹ Indian Medical Gazette 56, 1921, 189.

³² B. Gupta, 'Indigenous Medicine in Nineteenth and Twentieth Century Bengal' in C. Leslie (ed.), Asian Medical Systems: A Comparative Study, Berkeley 1976, pp.368-378; pp.374f.

³³ W. Breckon, The Drug Makers, London 1972, p.15.

³⁴ The drug makers were the descendants of sixteenth and seventeenth-century apothecaries who broke away from the grocers in 1617 following the Charter given by the State. This brought them into conflict with the doctors, for it allowed them the privilege of prescribing as well as dispensing drugs. By the beginning of the eighteenth century, many of them had gained a reputation as medical advisors and dispensers, which

process of standardisation during which the drug makers refined their products, published their formulae and the action of the products, and advertised them widely. The second was represented by the advances in the fields of bacteriology, pharmacology and immunology, as also in chemistry. The third included the development of improved techniques of industrial manufacture of drugs, such as vacuum distillation, which helped to produce drugs more cheaply.

Indigenous medicine did not keep pace with these advances in western medicine, yet the interest in indigenous medicine among practitioners of western medicine, though weakened, did not disappear. Dr. E. Houseman, member of the Bengal Medical Council of Registration, for instance, proposed to train practitioners of indigenous systems so that western practitioners could obtain assistance in their practice from a knowledge of indigenous drugs and methods of treatment. For in Houseman's view, indigenous medical systems were capable of considerable expansion and improvement and 'could derive benefit from this association with western medicine.' 35

Others in medical administration too showed continued interest in Indian medicine. Pardey Lukis, Director General of the Indian Medical Service, for instance, fervently commented on the subject of patronising these systems in his letter to the Bengal Government that 'there is much that is good in the Ayurvedic system, and there can be little doubt that for many years to come the majority of Indians will continue to be treated by this method.'36 Not only did he recommend the establishment of definite teaching institutions and Boards of Examiners for the indigenous systems of medicine, but he also suggested that a teaching institution where indigenous methods were flourishing most be taken as the 'focus of initiating this improvement'.³⁷ These pronouncements may be viewed in the light of pressure from Ayurvedic nationalists during the height of the national movement in India. This may have contributed to the Government's decision to found the fund the Astanga Ayurvedic College in the year 1918.³⁸

To maintain Government interest, indigenous drugs such as *Neem*, *Chirata* and *Anantamul*,³⁹ which were sold by medical men at the Medical College, were picked out from the published list, probably at the behest of the State. In the first decade of this century, the best doctors of western medicine of the Bengal Presidency, used, as pointed

divided medical practitioners into two groups: one concerned with medical practice and the other with the manufacture of drugs.

³⁵ Proceedings of the Government of India, Medical Branch, Aug. 1912.

³⁶ Ibid.

³⁷ Calcutta University Commission Report, 1917-19, vols. III and VII, Calcutta 1919, pp.57f., pp.194f.

³⁸ The initial proposal to fund the college was turned down in 1910 by the Board of Directors of the Ayurvedic Medicine Manufacturing Company. See *Proceedings of the Bengal Legislative Council*, Jan.-Dec. 1918, Resolutions, pp.464-475.

³⁹ Neem — Hindi: nīm, nimb, Sanskrit: nimba, botanical name: Melia azadirachta (Family Meliaceae); Chirata — Hindi: cirāytā, Sanskrit: kirātatikta, botanical name: Swertia chirata (Family Gentianaceae); Anantamul — Hindi: hindī sālsā, Sanskrit: nāgajihvā, botanical name: Hemidesmus indicus (Family Periplocaceae). Details from: Jain, S.K., 1968: Medicinal Plants, New Delhi, and Chopra, op. cit.

out by the Governor in Council, a well-known Āyurvedic drug called *Makaradhvaja*⁴⁰, for treatment of cases of typhoid and other ailments.

With the continuous use of indigenous drugs in the treatment of malarial fever and bowel complaints, which had a high rate of incidence among the local population, the supply of European medicines was gradually discontinued. Ghosh⁴¹, however, attributes the increasing utilization of indigenous drugs in this period to difficulties in obtaining supplies of drugs from abroad as a consequence of World War I. Accordingly, acute necessity was then felt for developing and utilising local resources as far as possible. *The Englishman* of Calcutta reported the cutting off of Central Europe as a source of supply of medicinal plants following the War,⁴² which probably gave impetus to the cultivation of more vegetable drugs in India.

In 1930, the Government appointed the *Drugs Enquiry Committee* to ascertain the extent to which indigenous drugs of impure quality or defective strength were manufactured and sold in British India. The appointment of this Committee was viewed by the Indian population as a move to counteract the Congress Campaign for the boycott of British drugs.

Following the First World War, the drug industry in Britain expanded considerably. Prior to this Britain had relied heavily on Germany for her pharmaceutical products. The lack of supply of products due to the outbreak of war, however, forced the expansion and increase of medical experiments and research in order to meet wartime needs. A similar process operated during the Second World War. Between 1937 and 1946 sales in Britain nearly trebled to fifty-eight million pounds. Thus, in the post-war period, while research and academic laboratories continued primary research on therapeutically significant compounds, the firms investigated to develop and produce them. This marked a clear shift from research by scientists working in medical school laboratories to research by departments of commercially motivated firms. The production of antibiotics was an important achievement of these firms.

On the basis of the aforementioned facts, a few points will be made in conclusion. British policy towards indigenous drugs commenced with encouragement and utilization of these drugs, at the same time spurring their clinical investigation. This represented the initial phase of the peaceful co-existence of indigenous and western forms of medicine. The increasing formalisation of medicine alongside the standardisation of drugs in Britain, however, led to tensions between the two forms of medicine. Nevertheless, the State, for reasons of economy, had an interest in promoting indigenous medicine and medical practice. Medical training, which formed an essential part of this policy, acted as a force for co-operation between the two medical systems. Since the turn of the twentieth century, with the rise of the chemical industry in Europe, western medicine posed a far greater threat to indigenous medicine than in previous years. In response to this threat, the nationalist movement called for the regeneration and extension of indigenous medicine. Nevertheless, by the end of the third decade of this century the

⁴⁰ This is an Ayurvedic drug prepared from mercury, gold leaf and sublimed sulphur. The preparation involves an elaborate process of treatment and purification (*sodhana*) of mercury. See Chopra, pp.413-415.

⁴¹ J.C. Ghosh, *Indigenous Drugs of India: their Scientific Cultivation and Manufacture*, Calcutta 1918, p.31.

⁴² The Englishman cited in the Pharmaceutical Journal of May 9, 1917 according to Ghosh, loc. cit.

dominance of European drugs in the Indian market was more or less complete, thus widening the gulf between the oriental and occidental medical systems.

Reviews and Notices

Un demi-siècle de recherches āyurvédiques. Gustave Liétard et Palmyr Cordier: Travaux sur l'histoire de la médecine indienne. Documents réunis et présentés par Arion Roşu. (Publications de l'Institut de Civilisation Indienne, Fascicule 56.) Collège de France, Institut de Civilisation Indienne: Paris 1989. (Pages CXXI + 615).

The question whether or not the present state of our knowledge of the history of Indian medicine and its literature warrants extensive research on the development of this knowledge and those who made important contributions to it may seem debatable to some actively engaged in studies on Ayurveda, but the recently published new book by Arion Roşu will probably convince them that the history of our discipline is an exciting subject.

The publication under review reproduces the text of all the books and articles on Indian (and Tibetan) medicine, reviews included, written by the two French pioneers of Āyurvedic studies, Gustave Liétard (1833-1904) and Palmyr Cordier (1871-1914). It also contains a complete bibliography of both authors (including works on medical subjects). This historically important collection is still extremely valuable, the more so since a large part of these writings was almost inaccessible. We should feel obliged to Dr. Roşu for his efforts in tracing these rare documents and making them available to us.

The works of Liétard and Cordier are preceded by a long, scholarly Introduction of seventy-two pages. This Introduction, based on meticulous research, is full of interesting material and replete with useful bibliographical references. Dr. Roşu not only presents the biographies of Liétard and Cordier, together with an elaborate discussion of their contributions to the history of Indian medicine and its literature, but gives at the same time a detailed survey of the development of our knowledge about Ayurveda from early times up to the present.

An attractive feature of the biographical part consists of reproductions of letters, mainly letters to Liétard, autographs, and other documents. Photographs of both protagonists are also found in the volume. The sections preceding and following the biographies deal with a large number of contributions to the study of Indian medicine and their authors. The focus is on western, especially French, scholars, although those from other European countries are, in general, duly taken into consideration.

The Introduction testifies to the author's wide reading and detailed research. He has succeeded in giving us a survey of the development of our discipline, as well as two biographical studies which will richly reward the reader. The account of the discovery of the documents concerning Liétard and Cordier and of the subsequent laborious investigations into the life-histories of these scholars, who became close friends, deserves the reader's particular attention.

Dr. Roşu's book provides fascinating glimpses of the character and the life of Liétard and Cordier. More complete biographical studies of these interesting personalities, together with an edition of their correspondence, might be well worth the effort. Transcriptions of the letters reproduced would have been welcome since the hand of the correspondents is not always easily legible.

The author's efforts in striving at completeness in his bibliographical references are admirable. Perfection, however, is unattainable.

H.H.M. Schmidt's edition and translation of the *Yogaśata* (Bonn 1978), preferable to that by J. Filliozat, is passed over in silence (CX, note 225). Some bibliographical references are not complete, for example those regarding F. Hessler (L, note 46), P. Mariadassou (CIX, note 213), and A.A.M. Esser (CXIII, note 246).

Misprints are very rare in the Introduction.

Gerrit Jan Meulenbeld

Sunirmal Datta Caudhurī, Gangā theke sur mā. Cakrapāņi bamser itihās. Nābhānā: Kal kātā 1988. 165 pp. Rs. 25,--.

Der Verfasser (wie ein Großteil seiner Vorfahren ein vaidya- nur noch der jāti- nach) ist ein direkter Nachkomme des mittelalterlichen bengalischen Arztes Cakrapāṇidatta (Verfasser mehrerer berühmter Werke der altindischen Medizin¹), und zwar aus dem Zweig der Familie, der sich schließlich in Shillong (heute im indischen Bundesstaat Meghalaya) niederließ. In diesem Werk zeichnet er die Geschichte Cakrapāņidattas und seiner Nachkommen bis auf den heutigen Tage nach, wobei er oft auch Persönliches einflicht (besonders ergreifend sind S.107-115, die Beschreibung eines Besuchs in der Heimat seiner unmittelbaren Vorfahren in Sylhet in Bangladesch). Seine Ausführungen zu Cakrapāņidatta und seiner Sippe basieren zum Teil auf englischen, zum größten Teil aber auf bengalischen Werken (alten und modernen, viele nicht einmal im bengalischsprachigen Raum sehr bekannt, geschweige denn im Westen), bisweilen auch auf Dokumenten in Familienbesitz (s. außer der Bibliographie am Ende des Werkes auch S.119); einige Thesen über das Leben Cakrapānidattas wird man im Lichte dessen, was er schreibt, eventuell neu überdenken müssen. Andererseits ist er mit vielem, was bisher über Cakrapānidatta geschrieben worden ist, nicht oder nur ungenügend vertraut (Einzelheiten z.B. bei G.J. Meulenbeld, The Mādhavanidāna and its Chief Commentary. Chapters 1-10. Introduction, Translation and Notes. Leiden 1974, S.400-402; zum Terminus antaranga- s. auch Rahul Peter Das, Das Wissen von der Lebensspanne der Bäume. Surapālas Vṛkṣāyurveda. Stuttgart 1988, S.423).

Leider beschränkt sich der Verfasser nicht auf das von ihm selbst als solches deklarierte eigentliche Thema des Werkes, sondern fühlt sich auch berufen, auf anderen Gebieten zu dilettieren. Daß wir im Werk mehrere der in Indien gängigen Klischees zum Wesen der altindischen Medizin wiederfinden, mag man dabei noch hinnehmen, sowie auch, daß er sich, obwohl wahrscheinlich kein geschulter Historiker, mehrmals über die mittelalterliche Geschichte Bengalens und gewisser seiner Teile ausläßt (S.44-57 sind übrigens gemäß S.14 der Nachdruck eines anderswo erschienenen Aufsatzes, den es wohl hier unbedingt unterzubringen galt). Peinlich sind aber die langatmigen Auslassungen (bes. auf S.125-158) zu Ursprung und Bedeutung von jāti- und varņa- und zum Kastenwesen, die mit dem Rest des Werkes gar nichts zu tun haben. Eine bessere Verwendung der Seiten wäre für die Präsentation weiterer Einzelheiten aus dem Leben Cakrapāṇidattas und seiner Nachkommen gewesen; eine zweite Auflage, sollte sie je erscheinen, könnte in diesem Sinne gestaltet werden.

¹ Eine Edition seiner Śabdacandrikā ist erst vor wenigen Tagen erschienen: Cakrapānidatta's Śabdacandrikā, ed. P.V. Sharma, New Delhi 1989.

Byams-pa 'Phrin-las [byams-pa hphrin-las], Wang Lei [van le] (translator and compiler of the original edition), and Cai Jingfeng [chehi cin hphun] (English translator and annotator, *Tibetan medical thangka of the four medical tantras*, People's Publishing House of Tibet: [Lhasa] 1988.

Sde-srid sans-rgyas rgya-mého (AD 1653-1705), the famous commentator on the standard handbook of Tibetan medicine known as the Rgyud-bźi or "Four Tantras", was responsible for the production in Tibet of a series of paintings illustrating all aspects of Tibetan medicine. The paintings were in the traditional Tibetan "tanka" (Tibetan thanka) style designed to be hung on the walls of the hospital and used for the purpose of instruction. This series of tankas illustrating the Rgyud-bźi is in many ways unique in the history of medicine as it includes not only the expected anatomical charts, but also a comprehensive collection of representations of thousands of items of Tibetan materia medica.

The series of medical tankas produced at the instigation of Sde-srid sans-rgyas rgya-mého was regularly copied. In his introduction to the present book Van-Le expressly mentions the production of three complete sets for teaching purposes in the years 1918, 1923, and 1933. According to him there are 130 tankas in the Tibetan hospital and 164 in the Commission for Cultural Relics. However, the original series consisted of 79 tankas, and it is not made clear which, if any, of the surviving tankas dates back to the seventeenth century. A survey of all the medical tankas in Tibet was made by two Chinese scholars, Cai Jingfeng and Zhao Pushan, who published an important article on the subject in 1980. According to them there were at that time 103 medical tankas in Tibetan hospitals. During my own visit to Lhasa in 1983 I was able to observe the copying of medical tankas. Many of the medical tankas are likely therefore to be of very recent date. However, close comparison of the tankas reproduced in the present publication reveals that none of them is identical with those that were on display in the Smanréis-khan when I visited it in 1983.

There has been considerable interest in the West in the Tibetan medical tankas. L.A. Waddell visited Lhasa in 1904 and brought back four copies he had had made of a medical tanka. One of these is now kept in the library of the Wellcome Institute for the History of Medicine as MS Tib. 119, another in the Royal Scottish Museum under the inventory number 1950.258. The only complete set of all 79 medical tankas known to exist outside Tibet is preserved in the Ethnographical Museum of Ulan Ude. Only a very few of the tankas had been made available in the form of published photographs until the publication of a magnificent colour facsimile volume by Byams-pa 'Phrin-las [byams-pa hphrin-las] and Wang Lei [van le] in 1986, in which the complete collection has been made available to scholarship. Due to the work of Cai Jingfeng the publication of this English edition has rendered the material still more widely accessible.

The facsimile edition contains an English foreword by Cai Jingfeng, the original brief historical introduction in Tibetan by Wang Lei followed by the same in English translation. The main part of the book consists in eighty colour plates reproducing the tankas. The final tanka does not belong to the original collection but is a modern addition. According to Byams-pa hphrin-las and Van-Le it was drawn under the auspices of the late director of the Sman-rcis-khan and depicts twelve famous physicians surrounding the central figure of Na-dban blo-bzan rgya-mcho. The physician illustrated below the

central figure is said to be Mkhyen-rab nor-bu (1879-1962), head of the Sman-rcis-khan. No information is provided concerning the age of the other tankas.

The descriptive text at the foot of the tankas is legible on the facsimiles, but most of the captions on the pictures themselves are too small or unclear to be read. However, the editors have provided small black-and-white photographs of those portions of the paintings that have captions and the captions have been assigned numbers for easy reference. The descriptive text at the foot of the tankas has been printed with a facing English translation preceding the small photographs. On the latter the captions are on the whole quite legible and are accompanied by English renderings or explanations.

The main difference between the 1986 Tibetan-Chinese and the 1988 Tibetan-English edition, apart from that of language, lies in the improvement made in the interpretation of the descriptive text. Seven of the tankas are paired. The paired tankas were intended to be hung side by side and for that reason the lines of their inscriptions must be read across from one tanka to the other. This was not realised by the editors of the facsimile volume at the time of the Tibetan-Chinese edition but was to some extent corrected in the Tibetan-English edition. It should be noted however that in the case of the Tibetan-English edition the editors have added material not present on the tankas.

Study of the tankas makes it clear that not only did the editors of the facsimile volumes not at first realise how the paired tankas were to be read but also some of the copyists themselves were unaware of the problem. Moreover, examination of the paired tankas reveals that the set of tankas reproduced in the facsimile volume is not an original set but made up from different sets. In some cases this means that inscriptions on the paired tankas cannot in fact be read line by line from one tanka to another. In order to reconstruct the correct wording of the inscriptions it is accordingly necessary to compare several versions.

The editors are to be congratulated on making this valuable material available to scholarship. This splendid volume deserves a place in every library concerned with the history of medicine. R.E. Emmerick

Essays on Science. Felicitation Volume in honour of Dr. S. Mahdihassan, ed. Hakim Mohammed Said. Hamdard Foundation Press: Karachi 1987. xvi;309 pp. Pak. Rs. 300,-- or US \$ 30,--.

S. Mahdihassan is well-known as a prolific writer on various subjects of interest to scholars of traditional Asian medicines, a large part of his output being devoted to matters Indian. Of the various subjects he has written on, special mention may be made of his studies on lac, alchemy and Soma. His writings, even though to a large extent apodictic and speculative, are nevertheless highly interesting and very informative. Of the various essays by scholars from several countries this volume in honour of Mahdihassan contains, some also deal with India. Mira Roy's 'Agriculture and Meteorology in Ancient India' (pp.51-58) is a haphazard collection of archaeological and textual data on meteorology and its relation to agriculture in India. It cannot by any means be called a systematic study: it does not even mention the Gurusamhitā, which has been edited by Lallanji Gopal, Banaras 1981. However, it may serve as a very preliminary introduction

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to the subject.² Shrikant Bahulkar's 'Atharvanic Element in the Ayurveda' (pp.66-74) is a collection of what the author calls "treatment void of rational basis" (p.74), mostly, though not only, from the four 'classical' Samhitas. Though not very original, it is a useful collection, and may also be of interest in connection with the contribution of Kenneth G. Zysk in this journal. S. Mahdihassan has contributed two articles — even though it is a felicitation volume in his honour.³ The first, 'Alchemy as a Branch of Medicine. Its Unsolved Problems and Unrecognized Terms' (pp.99-151), is a long and rambling discourse on the origins of alchemy in the same vein as many of his previous studies on the same subject. Alchemy is here derived from Chinese sources again, and we also find the etymological juggling for which the author is known. The second essay, 'Lac as Drug in Atharva-Veda and its Identity' (pp.221-244) (which also deals with plants actually or allegedly associated with lac) is not much different from the author's previous studies on the subject, which includes his derivation of Sanskrit lākṣā- from Chinese! We really learn a lot on lac from it, though the method of argumentation is apt to raise eyebrows. Finally, B. Rama Rao's 'Some Aspects of Medicine and Health in Medieval Andhra' (pp. 152-166) gives a brief overview of medical Sanskrit and Telugu works composed or studied in Andhra, followed by references to medical matters in non-medical works. The author opines that 'The region of Andhra evolved a special type of approach to Ayurveda' (p.154), and also that a mediaeval school of medicine flourishing in Andhra was called *Parahita* (p.164).

This volume contains a most impressive bibliography of the writings of S. Mahdihassan (pp.280ff.). I noticed several misprints, though none of them serious. It may be noted that diacritics seem to have been added by hand.

A final bibliographic note to avoid confusion: the Hamdard Foundation Press has published another volume with a similar title, namely, Essays on Science. Felicitation Volume in honour of Dr. Salimuzzaman Siddiqui, ed. Hakim Mohammed Said, Karachi 1986.⁵

Rahul Peter Das

² A comprehensive bibliography on meteorology in ancient India remains a desideratum. On agriculture see Rahul Peter Das, Das Wissen von der Lebensspanne der Bäume. Surapālas Vṛkṣāyurveda, Stuttgart 1988, pp.4ff.,503ff.

³ Apart from these two articles on the history of science in India, there are seven others co-authored by S. Mahdihassan, but dealing with pure science.

⁴ A most interesting passage on pp.238f. states: 'The Aryans even later on, up to the time of Satapatha Brahmana, were nomads, clad in animal skin. There was not much of woollen cloth and no need for a dye to colour it red. As nomads they frequently indulged in feuds and needed a drug to heal wounds and join fractured bones. If *Laksha* was such a drug it was quite enough for them.'

⁵ This volume also contains an article by S. Mahdihassan, 'Alchemy as Founded by the Ascetic and its Achievements' (pp.157-170).

Other Publications Received

- Bahādur, Māheśvar Umānāth: Bhūt vidyā, (Abhinav Yoj'nā 1), Dillī: Sahaj Ānand Kāryālay 1987. 200 pp. Rs. 50,--. (Subject matter according to p.9: Glympses [sic] of Demonology (Bhoota Vidya) in Indian Classics.)
- The Concept of Jaṭharāgni and Dhātwagni in Indian Medicine (With special reference to malabsorption), New Delhi: Central Council for Research in Ayurveda and Siddha (Ministry of Health and Family Welfare, Govt. of India) 1987. viii;187 pp. (Cover title: Concept of Jatharāgni [sic] and Dhātwagni in Ayurveda, also adds: Āyurved meṃ jaṭharāgni tathā dhātvagni kī saṃkalpanā. Contributors: S.N. Tripathi, V.K. Singh, A.K. Mishra, R.S. Singh, B.N. Upadhyaya, S.K. Srivastava.)
- Priyavrataśarman: Şoḍaśāṅgahṛdayam, Āryāvṛttabaddham āyurvedavivaraṇātmakam, Svopajñahindīvyākhyopetam, Vārāṇasī: Padmā Prakāśan V.S. 2044. 18;272 pp. Rs. 80,--.
- Sharma, Priya Vrat: Dr. P.M. Mehta Memorial Lecture, Further Probe into the Caraka-Samhita, July 20, 1989, Jamnagar: Gujarat Ayurved University 1989. 35 pp. (Many misprints, corrected by hand.)
- Simh, Hites: Bāṇ bhaṭṭ kī kṛtiyon mem vanaspati, Alīgarh: Trisimh Pablikeśan 1987. 9;160 pp. Rs. 120,--.

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